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This 1932 Vincent HRD Python Sports is America's oldest Vincent. P. 14.

CRAIG PATTERSON

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Getting dirty

We like working on our bikes almost as much as riding them. It's a chance to learn more about what makes them tick, so with that in mind we tended to some basic maintenance issues — oil change, spark plug, air filter — on our Royal Enfield Continental GT test bike (page 34). What did we learn about wrenching on RE's cool little café? Go to MotorcycleClassics.com/GT-tune to find out.



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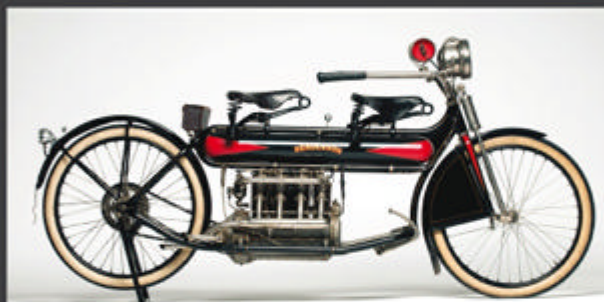
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Taking the pulse

Likely as not, a lot of you reading this magazine probably aren't aware that as we go about the business of putting together articles and coming up with ideas about what we think should be in *Motorcycle Classics*, we survey readers to see if they agree with us and to get their opinions on what direction they think we should be going. Vintage motorcycle enthusiasts are an opinionated bunch — no surprise there — and we learned early on that if we're going to try to deliver the kind of magazine you really want, we can't operate in a vacuum.

To that end, every other month we send out a couple of short surveys. The first queries readers for their opinions about stories in the making and stories we're hoping to put together. We ask you to rate your interest in a subject and a headline, and then use your feedback to help us decide what bike or bikes we should feature — or not at all. Once you've helped us decide what some of our stories should be and how interested you are in them, we follow up with a second survey asking your opinion on possible cover images for the bikes you've selected. We've learned a lot in the process.

One thing that's abundantly clear is that the majority of classic bike enthusiasts still love the usual British suspects; Norton, Triumph and BSA always rate high: If the surveys are any indication, you can't get enough of the bikes you once rode, still ride, or would like to ride. European classics are almost as strong, with major players like BMW, Ducati and Moto Guzzi the most appreciated. There are surprises, too, such as the view held by many readers that vintage Japanese bikes, even if they are appreciated at some levels, still aren't seen as classics. That's interesting to us given the long history of Japanese bikes in the U.S. — almost 60 years now — and the impact they had and continue to have on the market.

Besides getting opinions on stories and covers, we use our surveys to get direct feedback from readers, asking you to chime in with your thoughts on the magazine; good, bad or ugly. The direct replies we get highlight what a diverse lot you are, underscoring the fact you're a hard-core group of enthusiasts with varying opinions on what should and shouldn't be in the magazine. For every person who says "no more Triumphs, they've been done to death," three more chime in with "more Triumphs and Nortons," followed by someone who writes, "Too many articles on European bikes! Most of us have and are interested in Japanese."

The feedback we get is incredibly helpful, yet I'm convinced we're not getting the full picture. Right now, over 5,000 of you are on our advisory board. That's about 12 percent of our readership, and about 20 percent of the 5,000 of you who have already signed on regularly respond to our issue surveys.

According to the people who study these things, those are impressive percentages. Yet they also make me worry that we need more feedback to ensure we're not being guided by a vocal minority.

We want this to be *your* magazine, and that's why I'm encouraging every reader to join our Editorial Advisory Group. If you're not already part of the group, log on to MotorcycleClassics.com/newsletter to become a member. Once on that page, you can sign up for our free weekly newsletter and our Editorial Advisory Group, plus you can opt in for alerts about special products and programs from *Motorcycle Classics*. We're looking forward to hearing from you.

Richard Backus
Editor-in-chief



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“Perhaps next year you can spare some ink for coverage of the Festival of Jurby.”

Another Torpedo?

I picked up a copy of your magazine and enjoyed the story on the V4 Torpedo motorcycle (November/December 2014). You say that the Torpedo's are rare motorcycles? My grandfather, being of Czech/Slovak heritage, had a Torpedo motorcycle in his basement in Whiting, Indiana. There is a large population of Czech/Slovaks there. Many of them worked for the oil refineries and steel mills. My grandfather was very young when he rode his Torpedo on the streets and also raced at a local board track in the Teens and Twenties. I was about 5 or 6 years old in 1962 when I first saw this cool motorized bicycle resting under a tarp with flat tires and covered in dust and dirt. It's been more than 50 years since seeing it and I have no idea what happened to it. I know he got it there in the Whiting/Hammond area, possibly imported to the U.S. in parts and pieces

and put together there. I should do more research to see if any were imported there or manufactured in the Whiting/Hammond area. I wish Harry Molenaar was still alive, he was very knowledgeable on a lot of early motorcycles in the Calumet region.

Len Tumidalsky/Boise, Idaho

Remembering Guzzis

I enjoyed Doug Mitchel's article on the Moto Guzzi Ambassador (January/February 2015). I have owned a number of Guzzis, and they all had a story. I found one while travelling for work. On a side street in a back yard was a white Guzzi. I knocked on the door, and the person told me it belonged to his son, and was not for sale. Two years later I drove by the same area and the Guzzi was still there, sitting outside. I knocked on the door, and the person said he was sick of moving it to cut the grass. "Take

it," he said. I brought it home. The motor was stuck, but I unseized it, put a battery in it, cleaned the carbs and the fuel tank, and started it up. It ran well.

Stan Tusinski/Peabody, Massachusetts

Visiting the Isle of Man

After seeing the January/February issue of *Motorcycle Classics*, I had to subscribe. I was at last year's IOM Classic TT and loved Courtney Olive's work. The Isle of Man is like no place on earth. Thanks for the taste. Perhaps next year you can spare some ink for coverage of the Festival of Jurby. The best five quid I ever spent was to get into that mind-blowing event.

Bob Jaburek/Tavares, Florida

Flying Dragon

The article on the Flying Dragon Hondas (September/October 2014) has resulted in receiving some very good

RIDERS

Rider: Gary Webster, Torrington, Wyoming

Age: 60

Occupation: Retired railroad engineer

Rides: 1976 Kawasaki KZ900, 1976 Kawasaki KZ900 LTD, 1982 Kawasaki 1000 LTD, 1982 Suzuki GS1100GK, 1986 Honda XL600, 1994 Yamaha GTS1000, 1986 Yamaha FJ1200, 2003 Harley-Davidson FXDWG

Gary's story: "I've been riding since I was 12. When I turned 16 and started riding more, it seems like almost all of the bikes were 2-strokes with blue exhaust and the ring-a-ding noise. Even today, I miss the smell of those 2-strokes. I'm trying to remember the last time I pulled up to a gas pump where they had a spark plug cleaner on the island so you could clean your plugs.

"This is a picture taken in July of 1976 with me astride my new 1976 Kawasaki KZ900. I was in uniform on F.E. Warren Air Force Base in Wyoming. The next picture is of my son, Gary N. Webster, astride the same 1976 KZ900, 38 years later. My son is also in uniform, he recently took a promotion from a sergeant to a warrant officer. Hopefully this bike passes on to a grandkid someday.

"We both started riding at a very young age and I have a total of eight bikes. Many times when I am on my KZ900, other drivers and bikers flag me over to look at my bike. So many people tell me 'I had one of those bikes when I was young.' When I get on my Harley and ride the two lanes, every other biker gives me a wave, and it puts a smile on my face. However,



Gary and his KZ900 in 1976 (left), and his son on the same bike in 2014.

I can go home, get on one of my non-Harley bikes, get right back on the road with the same clothes and only get a quarter of the waves. Under my helmet I am grinning ear to ear. This is the bike I love and enjoy. This is when I am in my zone.

"My son Nick has picked up on that sentiment, too. New bikes are his interest. He likes big, naked, stripped down bikes like the new Kawasaki Z1000, but the U.S. Army is keeping him so busy training he doesn't have much free time. Sitting in my bike shed is an all original, low mileage 1982 Kawasaki 1000 LTD, winterized and waiting for him. Nick took his girlfriend at the time riding on this bike, and they recently got married. I can't wait until winter is over and the snow melts. I'm going to be on one of my bikes heading to the Atlantic Ocean, then hopefully up to Alaska."

responses, including one email from a guy in Northern Pennsylvania who had two tank sets in the original boxes (one blue/blue, one silver/purple, both for a CL350). The best news was from some readers in Tennessee who had recently acquired NOS parts and written records from the closed Cookeville, Tennessee, Honda dealership. Included were nine large binders, full of correspondence between Honda USA and the dealership over the years 1962-1982. The article stated that Bob had been looking for documents related to the Flying Dragon sets, and that rang a bell with the buyer. He went and found the document we'd been looking for. It's an official Honda Gardena "Custom Paint Set Order Form" that includes photos of three of the paint set colors. In an upcoming edition of the *VJMC Magazine* we've submitted an article that will include the newly discovered order form document. Without your magazine, this information would have never seen the light of day, and we're extremely grateful that your publication resulted in this discovery.

Don Stockett/Folsom, California

Getting small

I couldn't agree with you more about small bikes in general and the Kawasaki Ninja 250 specifically (January/February 2015); they're wonderful. As I've heard said many places, there is great satisfaction to be derived from riding a slow motorcycle (or driving a slow car) fast and well, and this is one place it is definitely true. Not to mention a lot of times you get the fun of going flat out playing boy racer — and no one else knows!

I got into the Ninja 250 by accident, having always been a BMW rider. Several years ago we bought my wife a Buddy 125 scooter and I really enjoyed it. I got to thinking about what it would be like to have that kind of weight with more power, so I started looking around. About that time a red 2006 Ninja 250 with only 1,000 miles on it turned up at the local Kawasaki dealer. I took it for a test ride and it was instant love; I took it home. Shortly after that the BMW (1979 R65 with dual-plug R100 engine) went on the block and was sold, as I just picked the little Ninja more and more. I love the Ninja; adequate power,

scooter-like fuel economy and no having to wrestle with it to get it up on the center stand! For commuting and low-key "sportbiking" one-up, I don't think you can beat it. A great (and greatly under-appreciated) little bike. I'm glad you gave it some credit!

Paul Burch/Hixson, TN

Another Ninja fan

Did I actually read that you have bought a 2005 Ninja 250? I am most impressed. I have a 2006 version myself. I have a Ducati 900SS/SP and an old Suzuki GS1100 in my stable, but it is the Ninja that is my daily bike of choice. You are going to have so much fun with yours. If you have not already done so, put on a set of Pirelli MT75 tires front and rear. They are really soft, but a set costs well under \$200. Then you can really start throwing it into the corners.

Christopher Mahalick/via email

Paul and Christopher,

You were way ahead of me appreciating the "Ninjetta" as a great machine. I opted for Pirelli Sport Demons. So far, they've been excellent.

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Circle #5; see card pg 65

7 Helmets to Keep You Riding

1 One of the coolest new helmet designs to emerge in the last few years has roots firmly in the past. The new Bell Bullitt Helmet takes its inspiration from the very first Bell Star helmet launched in 1966. Full of retro styling, the Bullitt incorporates modern safety and some nice touches. Made from fiberglass composite, it's light, comfortable and functional. A magnet on a leather strap holds the shield closed, and you can remove the shield entirely by simply unscrewing the retainer rings. The brown leather and perforated micro-suede interior fits comfortably and looks like a million bucks, and the head piece and cheek pads are removable for washing. Available in a variety of colors including the new Retro Blue shown here. Too cool. DOT approved. Price: \$399.95. More info: bellhelmets.com



1

2 Looking for something a bit more affordable in a full-face helmet, but still wanting that vintage vibe? Consider the Biltwell Gringo S. The full-face Gringo has been around for a bit, but the new Gringo S adds a shield, too. The shell is injection-molded ABS, with a shock-absorbing EPS liner, plus hand-stitched, brushed Lycra interior padding. The cheek pads are removable for cleaning and the inside of the chin bar wears BioFoam for comfort. Padding is a little on the thin side, most likely to help maintain the smaller profile that makes the Gringo S a really good looking helmet. The large eye port gives excellent visibility and the shield provides good optics, while a snap on the side of the shield latches it down when closed. DOT approved. Price: Starting at \$199.95/\$249.95 as shown. More info: biltwellinc.com



2

3 Don't want to go retro? Then turn the other direction and get a helmet from the space age. Not long ago, carbon fiber helmets were priced out of most people's budget, but no longer. Joe Rocket's Speedmaster Carbon features an attractive and lightweight carbon fiber weave shell and a lightweight dual-density EPS liner. The anti-fog face shield can be removed without tools and Joe Rocket's Quadport 2.0 ventilation system features two large front air intakes that channel air to a rear venturi-effect spoiler to pull heat and humidity up and out of the helmet. An adjustable chin bar intake vent helps move even more air when needed and the removable Air-Guide aids fog resistance. The comfortable interior is fully removable and washable. Snell and DOT approved. Price: starting at \$399.99. More info: joerocket.com



3

"Not long ago, carbon fiber helmets were priced out of most people's budget, but no longer."



4

4 Torc made its name in the U.S. with its expansive range of stylish and affordable open-faced helmets, but recently it's been expanding its offerings with helmets like the T27 Compass, the company's new modular helmet. Made of a fiberglass/nylon weave composite shell, the helmet features a one-button, flip-front design and an EPS liner that's channeled to allow for better ventilation. Adjustable chin vents move even more air, as does the top vent and integrated rear air extractor. The Compass features an integrated mechanical drop-down sun shield, a metal-on-metal post latch system, and a quick-release anti-scratch, anti-fog shield. The ultra-suede interior is fully removable for cleaning. Available with or without Blinc Bluetooth. DOT and ECE approved. Price:

\$163.99 (\$288.99 with Blinc, shown). More info: shop.torchhelmets.com



5

5 If you're looking for a comfortable, conservatively-styled, solidly crafted three-quarter helmet, the Arai XC is what you want. There's no denying that full face helmets offer more protection in the event of an accident, but many riders prefer the unencumbered view and feel of a three-quarter helmet. Arai's solution to improving a three-quarter's protection was to build extended jaw coverage into the XC by adding 1-3/16-inch to the lower front cheek pad area of the helmet. It feels more secure but without changing the open feeling of a three-quarter helmet. All Arai helmets feature composite fiberglass shells, and the XC uses two top intake vents and side cowl air exhausts, plus face shield eyebrow vents. A vented neck roll further enhances helmet ventilation by extracting more heat from the interior. Snell and DOT approved. Price: \$509.95. More info: araiamericas.com



6

6 The Italian-made Nolan N104Evo modular helmet features a light-weight and aerodynamic Lexan polycarbonate shell with built-in spoiler for improved stability. An integrated scratch- and fog-resistant sun shield is manually lowered by a slider but retracts instantly at the touch of a button. An included Pinlock anti-fog insert can be installed inside the clear shield for fog-free riding. The pivoting chin bar features a stainless steel latching mechanism, and can be locked in the open position so it won't accidentally close while riding with it open, an unusual feature as most modulares are designed to be used in the closed position only. The new Airbooster system channels air through tubes to disperse it efficiently along the crown of the helmet, and chin and top vents move even more air when necessary. The comfortable, nicely padded interior is fully removable and washable. DOT and ECE approved. Price: \$449.95. More info: nolan-usa.com



7

7 We were so impressed by the Schuberth S2 full face we sampled back in 2012, we decided to include the soon-to-be-released Schuberth Metropolitan 1 in our list. Modern and very sharp looking, the M1 is Schuberth's first three-quarter helmet and features a new seamless lining that is breathable, anti-bacterial and easier to remove for cleaning. There's also a click-down integrated sun visor that is available in five different colors, and the helmet is designed to be used with or without the clear removable full-face shield. The M1 comes pre-installed with a microphone and speakers for use with the optional SRC-System, a high-end communication system that can be used for phone calls, bike-to-bike discussions, navigation and listening to music. Price: To be announced, but likely around \$550. More info: schuberthnorthamerica.com

Mid-size commuter: 1974-1979 Kawasaki KZ400

Just as Kawasaki aimed the 1973 Z1 squarely at Honda's CB750, they also tried to out-Honda Honda in 1974 with the KZ400, their take on the best-selling CB350. As with the Z1, they leapfrogged Honda with more capacity, but stopped short of upping the ante further by giving their new little KZ400 the Z1's dual camshafts. Why?

The answer may be the intended purpose of the KZ400. While the 903cc Z1 threw down the performance gauntlet, the mid-size KZ400 twin was designed as an economical, easy-to-ride, unimposing commuter bike — and it arrived just in time for the 1973 oil crisis. Under an Arab embargo, the price of crude oil rose fourfold between October 1973 and March 1974. Suddenly, fuel consumption became really important.

Delivering around 60mpg, the KZ400 was certainly economical, and it would also comfortably keep up with traffic, especially at the then mandatory maximum 55mph highway speed. And while a 15-second quarter-mile time wasn't exactly blistering, it would leave all but the most muscular gas-guzzling cars sitting at the stop sign. But was the KZ400 just a bigger-inch CB350 clone?

The KZ400 engine used mildly over-square dimensions of 64mm bore and 62mm stroke for 399cc. The 360-degree crank (the CB's was a 180-degree) ran on four plain main bearings with a manually adjustable central chain driving the single overhead camshaft, which operated the four valves by rockers on eccentrics. (Rotating the rocker spindles allowed for valve adjustment.) And while the 360 crank produced smoother power pulses, just like British twins, the format invited vibration. Kawasaki fixed this in the 400 with maintenance free, chain-driven balance shafts. Lubrication was wet sump and ignition by a single contact breaker with a dual-output coil firing both cylinders.

A pair of 36mm Keihin CV carburetors fed the two cylinders,



In England, the KZ400 was sold as the Z400. This is a 1978 6-speed.

which exhausted with the aide of an equalizer chamber cast into the head. Drive to the wet multiplate clutch and 5-speed transmission was by Hy-Vo chain, with 530 chain final drive. The powerplant was installed in a conventional but solidly built mild steel tube frame with a telescopic fork and a twin-shock swing-arm rear end. Brakes were a single floating two-pot caliper disc front and single-leading-shoe drum rear. Equipment included electric start (with kickstart backup), external gear position indicator, crankcase oil level sight glass, and a warning light for a blown stoplight bulb, as well as separate tachometer and speedometer with trip meter.

Overall, it was considered an impressive package. "Ride the

ON THE MARKET

1977 Kawasaki KZ400 Deluxe/Unsold at \$2,199

Back in the mid-Seventies, riders didn't seem to think twice about touring on mid-sized bikes, a set of hard bags and a fairing transforming their CB350 into a cross-country tourer. Hoping to capitalize on that market, for 1976 Kawasaki offered the KZ400 A1 Deluxe. Painted "candy-copper" brown and sporting a matching brown seat cover, the Deluxe was factory equipped with a fairing, highway bars, hard bags and a luggage rack. It was dropped after 1977, apparently due to poor sales. We found this low-mileage example on eBay, where it failed to meet its "buy it now" price of \$2,199. Although showing a claimed 2,249 miles, it looked a little worse for wear from neglect, with badly scratched paint on the fairing and left saddlebag suggesting a fall or a garage mishap during its long storage. The seller claimed it ran "great," and while very complete, it would likely take some work to make road-ready. Rare and interesting, it is unlikely to increase much in value.



"The price of crude oil rose fourfold between October 1973 and March 1974. Suddenly, fuel consumption became really important."

KAWASAKI KZ400

Years produced	1974-1979
Claimed power	35hp @ 8,500rpm
Top speed	93mph (period test)
Engine	399cc air-cooled SOHC parallel twin
Transmission	5-speed (6-speed 1978-on), chain final drive
Weight/MPG	399lb (wet)/50-60mpg
Price then/now	\$1,170 (1974) /\$750-\$1,500

KZ400, even if only around the block, and you'll know it was designed to do things the way the CB350 did — only a little better," said *Cycle*. Most testers liked the overall smoothness and even power delivery of the engine, though some buzzing occurred at higher revs. The KZ started easily hot or cold and the transmission was vice-free. The steering was nicely neutral on even surfaces thanks in part to the sturdy double-cradle frame. But it was the KZ400's suspension that really came in for criticism.

"We think the front suspension is inadequately damped ... most of what the fork legs might be doing or failing to do gets obscured by the commotion back at the rear wheel ... a ferocious hopping can be provoked with hard application of the front brake," said *Cycle*, adding that "very nearly all that can be said of the KZ400's rear shocks is that they do provide a convenient strut mounting for the springs." They were, concluded *Cycle*, "overwhelmingly, miserably, abominably and infuriatingly cheap."

It was an issue Kawasaki never satisfactorily addressed over the five-year run of the KZ400, though there were other changes: an external oil line to the cam box stopped oil leaks from the cylinder head joint; the eccentric rocker spindles gave way to conventional screw adjusters; the transmission got an extra cog, making six gears; the carbs went from 36mm to 32mm (losing a couple of ponies, but improving fuel consumption); a better front brake with greater swept area; and an ingenious auto-retracting kickstand (triggered by the drive chain) was fitted.

Reviewing the final year's model in 1979, *Cycle World* seemed to have a somewhat mixed opinion of the bike: "Kawasaki has improved the KZ400. Problems have been eliminated. Convenience has been added. There is still a way to go. Even commuters deserve better suspension. A more comfortable seat would be nice. It's an easy to use motorcycle, which would seem to be just what commuters have been asking for." **MC**

CONTENDERS Two-cylinder rivals to Kawasaki's KZ400

1978-1981 Honda CB400T Hawk

Almost every *Under the Radar* includes a Honda: often, it's the benchmark bike. The CB400T is no exception. A brand new design owing nothing other than its parallel twin format to the previous 180-degree, 2-valve CB360, the Hawk used a 360-degree crank with chain driven balance shafts. A single exhaust and two intake valves per cylinder were operated by a single overhead cam, with the cylinders fed by a pair of 32mm Keihin CV carbs. Drive to the 5-speed tranny (1979-on had a 6-speed) was by straight-cut gears. The power unit was suspended from a pressed-steel spine frame holding conventional telescopic forks and dual rear shocks. The Hawk was initially available as the fully-equipped CB400T2 and the stripped T1, which lacked the 2's ComStar wheels, disc front brake, electric starter, tachometer and centerstand. However, it was 21 pounds lighter, held almost a half gallon more fuel — and was \$200 cheaper!

Cycle magazine's only complaint about the Hawk was some driveline lash and surging on throttle transitions. Their testers were particularly impressed with handling and suspension, though they were less keen on the styling, commenting that "they might appear pedestrian, but as motorcycles they function beautifully." *Cycle Guide* said that "the Hawks would seem to offer the best combination of performance, handling, braking and maintenance-free enjoyment in their class."

- 1978-1981
- 36hp @ 9,500rpm/100mph
- 395cc air cooled SOHC parallel twin
- 5-speed (6-speed 1979-on), chain final drive
- 401lb (wet, T2)/40-50mpg
- Price then/now: \$1,300 (T2, 1978) /\$750-\$1,500



1976-1982 Yamaha XS400

By the time Honda joined the 400 twin party, Yamaha, Kawasaki and Suzuki had already arrived (Suzuki notably with a DOHC engine). Yet the electric-start XS400F looked more modern, with cast alloy wheels and disc brakes fore and aft (like Honda, Yamaha introduced an economy drum braked, spoke wheel, kickstart only version for 1979). Between the wheels was a 180-degree crank, SOHC, 2-valve 400cc twin fed by dual 34mm Mikuni CV carbs. Drive to the 6-speed transmission was by straight-cut gears.

With no balancer shaft, the Yamaha was "the roughest running 400 4-stroke twin on the market," said *Cycle World*, noting its buzzing made the mirrors useless at speed. But the engine started easily hot or cold, and had smoother throttle response than its competition. *CW* found the gearshift occasionally balked and the clutch sometimes grabbed and dragged when hot. Front suspension was compliant, though the rear "beat the rider's kidneys."

The Yamaha was generally quicker than the KZ400, but slower than the Hawk. Braking was excellent, though the rear disc could lock easily. *Cycle* magazine summed it up: "The XS is neither the fastest in its class, nor the least expensive, nor the most comfortable. It is nevertheless a handsome, functional and economical motorcycle — easy to maintain, miserly with gas, and still competitive in a hotly contested class."

- 1976-1982
- 32hp @ 8,500rpm/96mph
- 391cc air-cooled SOHC parallel twin
- 6-speed, chain final drive
- 391lb (dry)/50-60mpg
- Price then/now: \$1,348 (1977)/\$750-\$1,500



2015 Bike Shows, Suzuki racing legend Hugh Anderson pens his autobiography

Show Time 2015: *Motorcycle Classics* Vintage Bike Shows

The 2015 vintage show calendar is filling up, and we're looking forward to getting out and mixing with readers and classic bike fans. Set your schedule now and join *Motorcycle Classics* at one of four different vintage events across the country.

On June 5-7, 2015, we'll be at the Rockerbox Motofest at Road America (roadamerica.com) in Elkhart Lake, Wisconsin. This will be the second Rockerbox Motofest at Road America, featuring two days of AHRMA vintage motorcycle racing on Road America's legendary 4-mile road course. We'll award a special *Motorcycle Classics* Editors' Choice Award at the Rockerbox Bike Show (proceeds support The Steel Toe Fund), which last year drew an eclectic selection of custom vintage bikes. There will also be live music, plenty of food vendors, a microbrew tasting, plus specialty vendors, custom bike builders, and more.

On Aug. 22, 2015, we head west to Tacoma, Washington, and The Meet at America's Car Museum (vintage-motorcyclefestival.com), which has quickly established itself as the Northwest's premier vintage event. We expect the biggest show yet following the decision to expand entry qualifications to allow bikes 25 years old and older; the limit was formerly 35 years or older. The swap meet, was greatly expanded in 2014 and returns for 2015, plus the Seattle Cossacks motorcycle stunt team will return to the 3.5-acre Haub Family Field. And of course there's the LeMay-America's Car Museum, a 165,000-square-foot facility filled with 350 vintage American and European cars. The Saturday only show features an excellent cross-section of vintage bikes, and we'll award a special *Motorcycle Classics* Editors' Choice Award. The Meet is capped off by the annual Sunday Ride, a relaxed tour through the Washington countryside.

On Sept. 4-6, 2015, look for us at the 10th Annual Bonneville Vintage GP (bonnevillenvintagegp.com) at Miller Motorsports Park in Tooele, Utah. The featured marque for the 2015 Bonneville Vintage

Bonneville
Vintage GP



Norton is the featured marque at the 10th Annual Bonneville Vintage GP.

GP is Norton, with former Norton employee and current Barber Vintage Motorsports Museum restoration specialist Brian Slark as Honorary Judge for the *Motorcycle Classics* Vintage Motorcycle Show, where we'll award trophies in two categories across five classes along with a Featured Marque award. The hyper-active Utah British Bike Club helps stage the bike show, and it's guaranteed to draw an impressive selection of Nortons. The Bonneville Vintage GP was the first motorcycle event held at Miller when the

venue opened in 2006 — it's a favorite of AHRMA racers, who show up in record numbers every year — and this year's 10th Annual should be the biggest and best ever.

Oct. 8-11, 2015, will have us heading back east to Leeds, Alabama, for the 11th Annual Barber Vintage Festival (barber-vintagefestival.org) at Barber Motorsports Park. Norton will again be the featured marque

for the *Motorcycle Classics* Vintage Motorcycle Show. It's a fitting tribute, as 2015 marks the 40th anniversary of Norton's last model in the U.S., the 1975 electric start Commando 850 MkIII. If the usual ingredients aren't enough for you (amazing swap meet, incredible AHRMA racing, Race of the Century — and let's not forget the world's pre-eminent motorcycle museum), rumor has it Barber is looking to draw a handful of Britten V1000 race bikes to the 2015 event in honor of the 20th anniversary of the death of John Britten, the V1000's builder. Only 10 Britten V1000s were made, and Barber hopes to have at least six of them on hand.

We're finalizing our schedule for the 3rd Annual Vintage Motorcycle Festival at New Jersey Motorsports Park, but hope to be there for what's turning into a great East Coast event, and dates for the 24th Annual Heart of America Motorcycle Enthusiasts Vintage Motorcycle Rally (kcmotoshow.com) in Kansas City are still pending. Last year's event featured an excellent Motogiro on Saturday before the Sunday show, to be repeated for 2015. Look for updated information at MotorcycleClassics.com/mc-events.

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Being There: The Hugh Anderson autobiography

Hugh Anderson is that rare person on two wheels, a versatile, thoughtful racer who turned his back on a promising career in New Zealand speedway racing to concentrate on road racing — in between working in the pits as a coal miner. Anderson's newly released autobiography, *Being There*, recounts the four-time World champion's fascinating exploits over a career spanning 55 years. Anderson won all five races in his first-ever Miniature TT, run at the age of 17 aboard a Francis-Barnett 2-stroke. Fifty-five years later, at the age of 72, he took the checkered flag on a Manx Norton in New Zealand's prestigious Pukekohe International Historic race meeting. In between, he won four World Championship road race titles for Suzuki, and after that became one of Europe's top motocrossers.

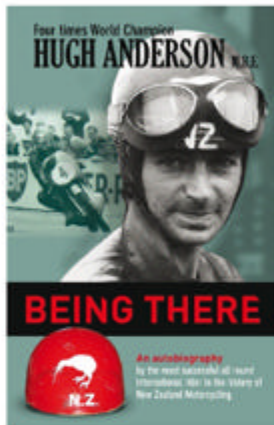
Anderson headed for Europe in 1960 to join the legendary Continental Circus, and progressed up the privateer ladder to compete in Grand Prix racing — in his first start in a GP he masqueraded as Rhodesian rider Shaun Robinson! Anderson established links with Suzuki's factory team in 1961 just as they arrived in Europe, forging a close relationship that brought him and the company four World titles in the 50cc and 125cc classes from 1963 to 1965. He also began racing in top-level motocross, with full approval from Suzuki. Anderson was the first rider to finish a

World Championship Motocross GP on a Suzuki, before walking away from road racing and a well-paid contract as a factory rider in favor racing in the dirt, first as a Métisse-mounted privateer, then on a CZ.

After buying a Matchless G50 in the early 1980s, Anderson began a second road racing career as a top Historic racer, winning more than 25 races in 1985-1990, including the prestigious Historic TT held at Assen alongside the Dutch GP, as well as the British Classic Race of the Year, and the Australian 500cc Historic championship.

Being There is an extremely readable, self-penned story. Packed full of interesting observations and fascinating minutiae, it captures the spirit of an age. His total recall of detail makes you feel you're sitting there looking over his shoulder while he's riding, grappling with the 125GP Suzuki and its short 500rpm powerband or how he finished second in the Dutch TT on the 50cc Suzuki with three spokes missing from its rear wheel after a vicious

slide. It's all there in great detail. It's a finely written memoir that gives an in-depth picture of what it was like riding for a Japanese factory in the early 1960s, especially for a company that was new to racing outside Japan. Fascinating. 372 pages, \$35 (approx.) plus postage. To order a copy go to kiwiclassic.com or contact the author directly at hughanderson@clear.net.nz — Alan Cathcart



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AMERICA'S OLDEST VINCENT

1932 Vincent HRD Python Sports 500

Story by Robert Smith
Photos by Craig Patterson

In the early days of the British motorcycle industry, it was common for small manufacturers to use “bought in” engines. Norton’s first TT winner of 1907 was powered by a Peugeot engine, and Royal Enfield started out with engines from Swiss manufacturer Motosacoche. The most popular proprietary 4-stroke engine of the 1920s by far was made by the Tottenham, London, firm of John Prestwich & Co, sold under the brand name “JAP.”

Hoping to capitalize on this market, in September 1930 the Rudge-Whitworth Company announced that it would make its 4-valve engines — including the race-derived bronze head models — available to bike makers under the brand name Python. One of their first customers was the fledgling Vincent HRD Company.

Rudge

During the 1870s, the licensee of the Tiger’s Head pub in Wolverhampton, near Birmingham in Britain’s industrial West Midlands, was one Daniel Rudge. A keen cyclist and innovator, Rudge’s key invention (British Patent no. 520) was the adjustable ball-bearing wheel hub, which rendered obsolete the plain bushings used to that date. It improved performance so much that racers using Rudge wheels had to start 10 yards back! After Rudge died in 1880, his company eventually merged with Charles Pugh’s Whitworth Cycle Company. Rudge-Whitworth was soon the most successful bike builder in Britain, building 75,000 bicycles in 1906 alone.

Rudge-Whitworth introduced its first motorcycle in 1911, using an engine of its own design. The single-cylinder 500cc used roller bearings for the connecting rod and had an intake-over-exhaust (F-head) valve arrangement. The variable-speed

“Multi” of 1912 established Rudge as a leading motorcycle manufacturer, but by the early 1920s its design was obsolete. In response, John Vernon Pugh, then chief designer, decided to leapfrog the competition.

Many overhead valve engines of the day experienced valve issues. To achieve higher performance, valves were made larger. Unfortunately, these were more prone to breakage and the larger ports often led to cylinder head distortion. Four smaller valves meant lighter weight and less risk of a valve head separating, and smaller ports meant less cylinder head distortion. Engineer Harry Ricardo was working on a 4-valve engine for Triumph, and Pugh arrived at a similar solution. The 4-speed, 4-valve pent-roof cylinder head 350cc “Rudge Four” was introduced in 1924 — the same year then 16-year-old Philip Conrad Vincent bought his first motorcycle.

Vincent HRD

Vincent’s first foray into motorcycle manufacture is well recorded. After designing his cantilever rear suspension system while at Cambridge University, Vincent dropped out of school, and with financial support from his family purchased the trademark, goodwill and remaining component parts of the defunct HRD Motors Ltd in 1928.

HRD had a good racing pedigree, winning the 500cc Isle of Man TT in 1925, with five more top 10 finishes in the 500 and 350 TTs over the next two years. But in a failing economy sales fell, and HRD ran out of money. Having bought the brand, Vincent decided to cash in on the associated goodwill, naming his new company The Vincent “HRD”

Co. Ltd.

Developing a new engine from scratch would have taken time and considerable investment, so the first Vincent HRDs used bought in JAP engines, though engines from Motosacoche and U.K. companies Blackburne and Villiers were also used. The engines went into a triangulated frame of Vincent’s own design, built from straight tubes welded together and with the Vincent cantilever rear suspension. Sales were disappointing, and the blame fell on the triangulated frame. The notoriously conservative British motorcyclist balked at the clever but unattractive frame, and treated the

“Vincent decided to cash in on the associated goodwill, naming his new company The Vincent ‘HRD’ Co. Ltd.”





**1932 VINCENT HRD
PYTHON SPORTS**

Engine: 499cc air-cooled 4-valve OHV single, 85mm x 88mm bore and stroke, 6.8:1 compression ratio, 30hp

Top speed: 85-90mph (claimed)

Carburetion: Single bronze-bodied remote float horizontal slide 1-1/8in Amal

Transmission: 4-speed Burman

Electrics: 6v, BT-H magneto/generator

Frame/wheelbase: Single downtube Vincent diamond-type w/engine as stressed member/54in (1,372mm)

Suspension: Brampton girder with friction damper front, triangulated cantilever w/coil springs and friction damper rear

Brakes: 7in SLS drum front and rear

Tires: 3.25 x 19in front and rear

Weight (dry): 310lb (141kg)

Seat height: 26.5in (673mm)

Fuel capacity: 2.75gal (10.4ltr)

Price then/now: £60 (\$210)/\$100,000-\$125,000



The engine is fed by a single bronze-bodied remote float, horizontal slide 1-1/8-inch Amal carburetor (above).

rear suspension with suspicion. And while JAP engines were widely used (the V-twins were even good enough for George Brough's Superior), Vincent thought something more sporting than JAP's ubiquitous 500cc overhead valve single would sell more bikes.

The Rudge Python

Though Rudge had stayed out of racing during the early 1920s, they returned for 1926 with a 500cc version of the 4-valve, pent-roof engine. Entries in that year's senior TT yielded a 13th and 15th.

Then in 1928, Graham Walker won the Ulster Grand Prix on the 500cc Rudge, repeating the feat in 1929 at an average speed of over 80mph. So impressive was this achievement, that Rudge renamed its 500cc Sports model "Ulster."

In 1930, Rudge introduced a new cylinder head design for its 350cc race bikes, with the four pushrod-operated valves set radially around the head; six rocker arms operated the exposed valves. 1930 was also Rudge's best racing year, with

a spectacular 1-2-3 finish in the Junior TT, and 1-2-6 and 7 in the Senior.

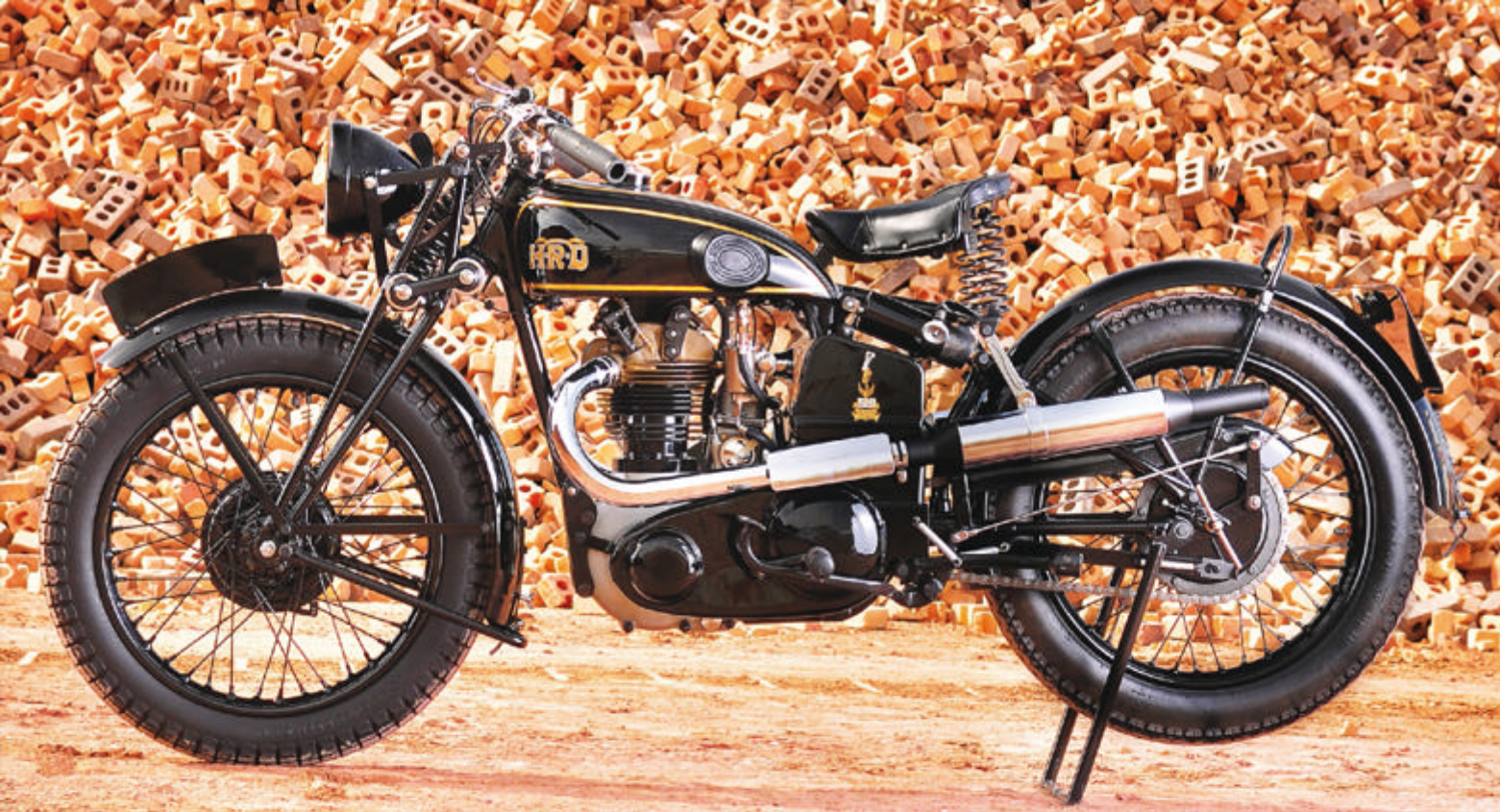
For 1931, the 500cc race bike received a new valve arrangement, with parallel intake valves and radial exhaust valves, while the Special, Ulster and 500 Replica retained parallel valves. In the same year, Python 350cc and 500cc engines became avail-

able to other manufacturers.

The HRD Python

1931 was also a pivotal year for Vincent HRD, with the arrival from Melbourne, Australia, of a talented young engineer: Philip E. Irving. The story famously goes that Irving traveled overland riding pillion on a 1929 600cc HRD motorcycle ridden by a John Gill of Bradford, England, who was completing a round-the-world ride. Serendipitous or not, Vincent hired





Irving, first to redesign the HRD frame and rear suspension layout. Irving came up with a more conventional open diamond frame of lug-and-braze construction, introduced as an option on 1932 models while the triangulated frame was phased out.

For the 1932 model year, Vincent HRD offered a choice of engines, 350cc or 500cc, with either single- or dual-port JAP, and either Python or Python Sports engines.

The Python Sports engine was a 499cc 4-stroke single of 85mm x 88mm bore and stroke with pushrod operated overhead valves. By 1932, Rudge had adopted the "semi-radial" 4-valve layout for the 500 Sports on the basis that it was less complicated and more reliable than the full radial head, and performance differences were minimal. The Python Sports cylinder head was also cast in aluminum-bronze for better heat dissipation.

Moving forward

Two factors contributed to Vincent's decision in 1934 to develop his own engine. First, Rudge's fortunes declined in the early 1930s. Metallurgy had moved on, and the 2-valve overhead cam Nortons and Velocettes were at least as reliable and were faster. In 1934, Rudge announced it would cease deliveries of Python

engines. That left JAP as Vincent's only viable source of proprietary engines.

In 1934, Vincent HRD entered the Isle of Man Senior TT with motorcycles powered by a new JAP racing engine. Unfortunately, engine failures meant none of the Vincent-JAPs completed practice or the TT itself — not quite the result Vincent was looking for, and a serious blow to JAP's reputation. So Vincent and Irving set to, and between the TT races in June of 1934 and the motorcycle show at London's Olympia stadium in November, they completed their design. The 500cc Meteor and Comet were launched in 1935.

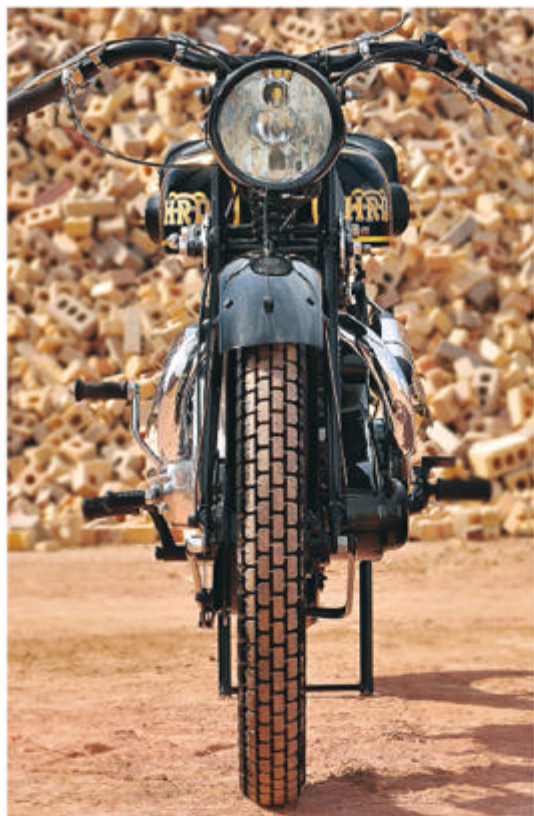


The cylinder head of the Python Sports was cast in aluminum-bronze for better heat dissipation (above).

Gene Brown's 1932 Python Sports

Gene Brown owns what he believes to be the oldest Vincent in North America. It's a Vincent HRD Python Sports that was dispatched to its first owner on Oct. 15, 1932. And Brown has the Vincent "Works Order Form" — signed by none other than P.C. Vincent himself — to prove it. "It was tested by Phil Vincent and passed by Phil Irving," Brown notes.

Brown had heard that Herb Harris of Harris Vincent Gallery in Texas (see sidebar) had most of a Python Sports in boxes, but hadn't completed the restoration. "I'd been hearing about (the Python Sports),"



Owner George Brown is aware of only two other Python Sports. The restoration of Brown's bike took just more than 10 years.

England that I know of. There were 106 of these made between 1932 and 1934. The VOC (Vincent Owners Club) in London says there are five or six left, maybe."

Brown is aware of only two other Python Sports. One, featured on the cover of MPH, the Vincent Owners Club newsletter, "wasn't exactly correct," Brown says, and another is reportedly in Austria. The restoration of Brown's bike, carried out by Harris, took 10 and a half years!

"This bike was in pieces for 15 years," says Brown. "I have a

list of all the prior owners. Obviously the first owners were in England. And the most difficult thing to find was the headlight." The headlight was made for BT-H, the British Thomson-Houston Company, by specialty light manufacturer Powell & Hamner Ltd., Birmingham, England. "One day we were looking on eBay and it showed up. In Austria, of all places. I think they had a big Vincent dealership in Austria. Two and a half years of searching, and it was barely salvageable."

Restorers of Python Sports-engined bikes have reported problems with poor quality bronze cylinder head castings,

says Brown, who was intrigued by the bike's rarity. "It's hell on wheels to find parts for," Brown says he was told when he contacted Harris, who added, "But if you're looking for a rare bird ..." "I sold three bikes to get two," Brown says, the other bike being a rare black-framed but otherwise red 1952 Vincent Series C Rapide.

"The attraction of this bike (the Python Sports) was that, basically, from what (Vincent specialist) Somer Hooker has told me, it's the oldest Vincent in North America. And he's as knowledgeable about Vincents as anyone else outside of

Harris Vincent Gallery: Making the most of Vincent motorcycles



Herb Harris and the Rollie Free "Bathing Suit Bike" at the Legend of the Motorcycle show in 2007.

Most of the work to resurrect Gene Brown's HRD Python was carried out by acknowledged Vincent master restorer Herb Harris at his 2,400-square-foot facility in Austin, Texas. Over the years, Harris has owned and restored some of the most distinguished Vincents in the history of the make, including the 150mph Rollie Free "Bathing Suit Bike" and Marty Dickerson's famous "Blue Bike."

Harris' dogged determination to build the bike to original led him to Ireland, where an enthusiast had the Python Sports' original numbers-matching rear frame, sporting the same gray paint under layers of subsequent black paint as the main frame. To give some idea of the meticulous preparation that went into the Python Sports, Harris determined there were four different types of black finishes used on the bike, including high gloss paint, stove enamel and a blackened finish similar to Parkerizing used on many of the fasteners. Each finish was recreated separately. Similarly, many different plating finishes were used including chrome, nickel and cadmium, and Harris sourced the correct bronze-bodied 1-1/8-inch Amal carb. It was critical to the success of the restoration to get these particular details right.

Many parts had to be re-worked or manufactured from scratch. Items like the correct High Gate mufflers and original equipment, period thin-gauge spokes, as well as fastidious attention to choosing the correct fasteners and finish for each component ensured the bike's authentic period appearance. It is, quite frankly, a remarkable achievement. — Robert Smith



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but Brown's Python Sports hasn't had any issues. "Many of them weren't done right at the foundry," Brown says, "and they cracked. But this has one that is solid. It's one of the few things that didn't have to be redone." In fact, many unobtainable parts had to be made or copied from pictures and period drawings — like the pinstriping on the gas tank. "The configuration was determined by finding old pictures of an HRD-PS being put together at Stevenage."

Brown's bike was painstakingly restored, and naturally, it runs. "It has to run because it's won three significant best-in-shows, and one of the requirements is it has to run," Brown says. "It won Best of Show at Del Mar in September 2013, Best of Show at Quail in May 2013. It won its class at Radnor Hunt Concours in Marlborough, Pennsylvania, and it won best in show basically at the (2014) Barber Vintage Festival in October." Brown took his Python Sports to Barber for the gathering of the Vincents organized by Hooker, entering it in the *Motorcycle Classics* Vintage Bike Show, where Vincent was the featured marque. It took top honors.

Surprisingly, perhaps, Brown

isn't scared to ride the Python Sports, if sparingly. "I've had a lot of fun with this bike. I don't ride it very often, but I ride it around the neighborhood to keep the oil in circulation. It only takes 2-1/2 pints of oil and there's no filter," Brown notes. "It's a hell of a bike. The top end is supposed to be 85-90mph, and I was doing 40mph in second gear."

Brown was riding the HRD one time when he noticed the headlight switch was loose. "After about 20 seconds, it falls off the back of the headlight and I catch it before it hits the ground. I told Herb the story and he said, 'well you saved yourself about \$1,000 because that light switch is about that, and we'd have to make one!'"

Brown, who has a growing collection of motorcycles, says he plans to keep the Python Sports. "I'm not usually one to turn things," he says. "This bike is extraordinary, because of the whole history. I'm kind of into things that are very rare, that are pristine and cannot be replaced. You can get a 1968 Bonneville all day long," he notes — but it's very unlikely you'll ever find another 1932 Python Sports. **MC**



The headlight was made by Powell & Hanmer Ltd. for BT-H. It was found on eBay after two years of searching.

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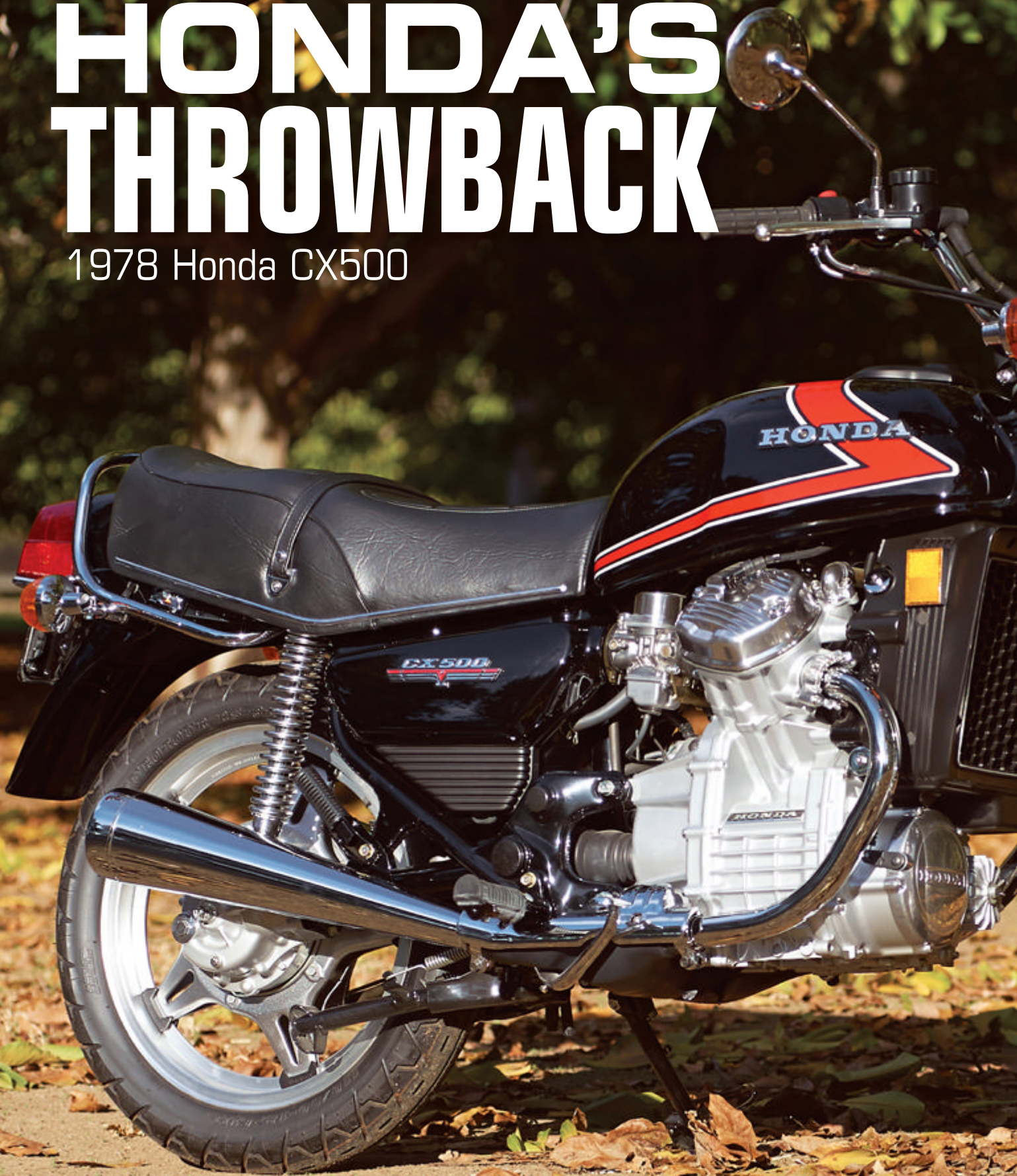
Bonhams

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HONDA'S THROWBACK

1978 Honda CX500





Story by Margie Siegal

Photos by Nick Cedar

Once upon a time, a motorcycle was transportation. Faster than a streetcar and more reliable (and cheaper) than a horse, motorcycles were bought by thousands of people who used them to get to school or work. Delivery services and police departments relied on motorcycles to get where they wanted to go quickly and economically.

Most motorcycle manufacturers got started building reliable, economical get-to-work bikes. Honda was no exception. Yet as the 1950s gave way to the 1960s, in developed countries like the U.S., England and Europe, motorcycles stopped being transportation, morphing into a Lifestyle Statement instead. Bikes sprouted exotic bodywork, multiple cylinders, overhead cams, high handlebars and fancy seats. Advertisements stopped mentioning miles per gallon and started crowing about quarter-mile times.

Yet in the late 1970s, Honda, then (and still) the largest motorcycle manufacturer in the world, decided to return to its roots and produce a reliable motorcycle aimed at the get-to-work crowd. Honda's brief called for reliability and low maintenance, and up-to-date technology. The CX project was headed up by Shoichiro Irimajiri, who designed Honda's 6-cylinder road racer in the mid-Sixties. After two prototypes were designed and built, one displacing 350cc and another 500cc, the decision was made to make the new model a 500. The CX was given liquid cooling, a 5-speed gearbox, constant velocity carburetors and shaft drive. Surprisingly, it was not given an overhead cam engine.

Design considerations

The decision to use an overhead valve design with pushrods on an otherwise very modern machine may seem a little strange, but was compelled by the longitudinally-mounted, 80-degree V-twin design, which had the crankshaft in line with the frame as on a Moto Guzzi. To accommodate this, the 4-valve heads were skewed 22 degrees to keep the carburetors from banging the rider's knees. That skew would have made it very difficult to use overhead cams, so it was back to pushrods. The pushrods were short and hollow, and an exceptionally (for then) over-square bore and stroke of 78mm x 52mm let the engine rev to 10,000rpm. Mated with a free-flowing intake tract and large carburetors, the engine had good volumetric efficiency.

The crankcase and transmission housing were a single casting, with the cylinders cast in with the crankcase. Crankshaft, camshaft and gearbox removal was accomplished by removing individual end plates. The arrangement is reminiscent of very early motorcycle construction, and creates some repair complications. For instance, you have to remove the gearbox internals before removing the left connecting rod bolts, and you have to pull the engine out of the frame before removing the gearbox.

Spinning the reverse direction of the crankshaft, the transmission and clutch served as a counter-rotating mass, offsetting the V-twin's torque reaction. The engine was a stressed member of the frame and was located as the exact center of mass of the motorcycle, making the relatively heavy 449-pound bike handle surprisingly well.

The rear shocks featured two-stage damping, unusual at the time, and the CX's tubeless tires were a first for a production motorcycle. These were made possible by Honda's new ComStar solid spoke wheels, with a disc brake up front and a quite decent drum brake in back.

Out in the market

When Honda wheeled its new creation out into the light in early 1978 its ads trumpeted the CX as "First Into The Future." Contemporary magazines were, in general, impressed with the new offering. They liked the engine's 10:1 compression ratio and its ability to rev to 10,000rpm — while sipping regular gasoline: One magazine



1978 HONDA CX500

Engine: 496cc liquid-cooled OHV 80-degree V-twin, 78mm x 52mm bore and stroke, 10:1 compression ratio, 48hp @ 9,000rpm (claimed)
Top speed: 111.9mph (period test)
Carburetion: Two Keihin 35mm CV
Transmission: 5-speed, shaft final drive
Electrics: 12v, electronic CDI ignition
Frame/wheelbase: Tubular backbone w/engine as stressed member/57.3in (1,455mm)
Suspension: Telescopic forks front, dual shock absorbers w/adjustable preload rear
Brakes: Single 10.8in (274mm) disc front, 6.3in (160mm) SLS drum rear
Tires: 3.25 x 19in front, 3.75 x 18in rear
Weight (wet): 481lb (219kg)
Seat height: 31.9 (810mm)
Fuel capacity/MPG: 5gal (19ltr)/40-50mpg
Price then/now: \$1,898 (1978)/\$1,500-\$5,000

recorded an average of 51.5mpg. The CX got low marks for its weight (it was the heaviest 500 on the market) and its odd looking engine, and its weirdly designed headlight nacelle was hated by all. Out on the road, testers enjoyed the powerful but quiet engine — but not the transmission, which if handled clumsily either clunked or missed shifts. They also disliked the tethered gas cap and the soft springs in the Showa forks, which bottomed out on hard braking.

The market reacted favorably. Buyers read the reviews, decided they liked the idea of a technologically advanced bike that was fun to ride, quiet, and reliable, and bought a lot of CXs, proving that Honda was right — there was still a market for a get-to-work bike.

Buyer enthusiasm was damped but not destroyed by a recall at the end of 1978. The CX's camshaft was driven by a chain off the crankshaft. The chain was tensioned by a rubber blade, but because the bolt securing the blade tightened against rubber, when the rubber lost its spring the bolt on early 1978 CXs could come loose, with unfortunate results. Honda CX500 owner Larry Cargill points out that the recall is still in effect. "Most bikes that have survived all this time have the issue taken care of, but if the one you



have hasn't, Honda still honors the recall. If you buy a 1978, look to see if it has three triangular dots near the serial number, which means that it has been fixed. Honda took care of the issue in late 1978."

In 1979, Honda offered the CX in three versions. There was the standard CX500 (pretty much the same as the 1978 version), the Custom (peanut tank, hi-rise bars) and the Deluxe. Marketed as a middleweight tourer, the Deluxe had a seat that was 1.5 inches lower and more comfortable on long rides, a side stand that was easier to deploy from the saddle, and more attractive solid-spoke ComStar riveted wheels. The tethered gas cap was also improved. As Patti Carpenter of *Road Rider* said, "These changes have made what was already a nice, hard working 'middleweight' into a more attractive, more comfortable and more manageable touring machine."

CXs proved to be incredibly popular with dispatch riders. In England, the CX became known as the "despatch" rider's

mount of choice. While not the prettiest or the best handling bike, the CX would run all day in any weather and put up with minimal maintenance and repeated abuse. It was perfect for urban use.

The standard version was dropped after 1979, but the Deluxe was offered until 1981 and the Custom was produced until 1982. The GL500 Silver Wing Interstate, a full-on touring bike complete with full fairing, appeared in 1981. The CX was bumped up to 650cc in 1983, but by then it was living on borrowed time. The American motorcycle market had gone into a nose dive, and any Honda model that wasn't a best seller faced the ax. CX production stopped after 1983.

Larry Cargill's CX500

Larry Cargill is a very busy man. Retired from a government job three years ago, Larry has never had more to do. Word has gotten around that he builds spot-on replica fiberglass for Honda GL Silver Wings, not to mention excellent engines



The longitudinally-mounted V-twin has the crankshaft in line with the frame as on a Moto Guzzi (top). The 4-valve heads are skewed 22 degrees to tuck the carbs in tight, out of the way of the riders knees (above).

for 1970s and early 1980s Hondas. "Ever since I retired, it's been nonstop work on bikes," Larry says.

A mechanically apt person like Larry could probably keep any bike running, yet with many to choose from, his bike of choice is the Honda CX500. "These bikes were way beyond their time when they were built," Larry says. "They are maintenance free except for oil changes and valve/cam chain adjustments. They have plenty of power and the handling is good after some simple modifications are made," he explains.

A lot of people kept their CXs, often putting huge miles on them. But at some point, even a well-maintained CX needs a rebuild. Enter Larry. "I used to ride enduros on a Yamaha when I was young, and I have always liked to fix things. A guy at my old job wanted to get his bikes running. He had a first year CX500 and some other bikes. I restored his Honda CM500T for him and kept the CX. That's how I got into restoration," Larry says.

Larry rebuilt the engine and the frame of the CX, learning a lot in the process. "It was back when Honda still had parts." The CX was running, but not running comfortably. Looking closer, Larry discovered there is a very tiny orifice in the CX500 Keihin carburetor low jet that eventually gets plugged. Getting the pressed-in jet out of the carburetor wasn't easy, but Larry figured out how to do it. With the jets cleaned and reinstalled, the bike's responsiveness and power was amazing.

Larry posted his findings on the CX500 forum (cx500forum.com). He discovered this was a common issue and was told he should write a book — so he did. The book, *Larry's Guide to Rebuilding the Keihin CX/GL Carburetors* (see Cool Finds, page 88) has gained wildly positive reviews, with several forum members suggesting Larry deserves a Pulitzer Prize!

After collecting new OEM parts from all over the world, Larry set out to complete a full frame-up restoration. Every part was redone — "All the way down to the

nuts and bolts," Larry says — with new chrome, zinc plating or paint as used by Honda. Larry worked hard at it, as he had a deadline in mind — the annual Classic Japanese Motorcycle Club show held in Auburn, California. Larry decided there wasn't enough time to repair the existing engine in his CX, so he went looking for another one. "I found a motor on eBay that appeared to be a replacement motor from Honda, with no serial numbers. After rebuilding this motor completely



Owner Larry Cargill restored this Honda CX500 to have as a show bike, but he has another CX500 that he rides frequently.

with all OEM parts, I figured that getting it registered would be a bear, but the lady at the DMV found the bike in the system and reregistered it without the serial number on the motor. I've never found another Honda motor without a serial number. In my opinion, it adds to the nostalgic history." Larry worked feverishly to finish the CX. Nine days before the show, Larry was painting the tank when he realized that he had painted it with the wrong year's design. After ordering more tank decals from BDesigns (bdesigns.ca), Larry finished the bike. "I finished painting the correct tank at 5 a.m. the day before the show. I waxed and polished the bike at the show — but I made it," Larry says.

Riding and wrenching

This CX runs and rides well, but Larry wants to keep it as a show bike for the most part. Fortunately, he has another CX, one that he rides frequently, and both bikes feature suspension upgrades Larry has worked out. "The front end on the stock bikes is really soft. One of the problems is the light oil Honda recommended. I use 20-weight Bel-Ray. I collapse the fork and fill it [with fork oil] 5 inches from the top, then extend the fork and use a spacer between the springs. I

get 3/4-inch sprinkler pipe nipples and cut them between 3/4- to 1-inch long, depending on the firmness I want. It stiffens the front end and keeps it from bottoming out under hard riding conditions. It's like riding a totally different bike. With the hesitation in the carburetion fixed and a stable front end, this is a solid bike and much more fun to ride," Larry says.

The stock front disc brake uses a single-piston caliper, but despite positive period reviews, Larry thinks it's less than adequate. "I didn't change the brakes on this bike since it was intended as a factory restoration, but if you use Teflon braided brake lines, it's 60 percent better. Rubber lines expand. JDA Enterprises (jdaent.com) makes rubber-covered lines that look almost original. You can also upgrade to dual-piston calipers from the 1983 GL650 Interstate."

Larry suggests changing the oil every 2,500 miles and using Shell Rotella T 15/40 oil after the engine is broken in. "It's made for diesel engines and has a zinc additive, but if you use it in a brand new engine the rings won't seat." Another tip is adding a little GM Engine Oil Supplement, a high zinc additive now marketed as engine assembly lubricant.

The 1978-1981 CXs were fired with a CDI ignition. "There are two trigger wind-

ings and the high end coil goes bad. In 1982 Honda went to a transistorized ignition, which is bombproof." Larry replaced the stator on his 1978 with one rebuilt by Custom Rewind (customrewind.com). "They are much better quality than the OEM originals," Larry says.

"These bikes are running more than 30 years after they were made. They have plenty of power and regularly blow away Harley Sportsters. Not bad for a 36-year-old bike. After the suspension modifications, they handle well, and if you keep the oil changed and keep the coolant level correct, the bike will run cool and not have problems. Simple maintenance is the key to longevity. There are bikes out there that have gone well over 100,000 miles and more," Larry says.

"There were many made and a high number are still running. We have 23,652 people on the CX forum who love and support these bikes. I think that's why so many of these bikes are being brought back to life after years of sitting in storage. People all over still get to work on them and ride them for pleasure.

"I want to put the bike on the map and give it the respect it deserves. The CX has earned a well-deserved place on the map of history, right alongside so many other collectable machines." **MC**

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MILE EATER

1948 Triumph Speed Twin



By Greg Williams
Photos by Rick Schunk

Only 49 miles show on the Smiths speedometer, but this all-original 1948 Triumph Speed Twin has traveled some hefty distances. Come again?

Before we get too far into the story, let's chart the mileage. According to current owner and motorcycle collector Sid Chantland, this Speed Twin left Triumph's factory in Meriden and went to Al Shirer's Indian and British motorcycle shop in Allentown, Pennsylvania, a journey of 3,442 miles. When it left

Allentown, the Speed Twin traveled to Japan, a journey of 6,710 miles. From Japan, the Triumph was shipped to Northern California, roughly 5,249 miles. Finally, it moved from California to Sid's property near Minneapolis, Minnesota, another 2,076 miles.

The distances are approximate, of course, but that's a grand total of 17,477 miles, all without the engine ever having been fired. The 49 miles accumulated while being rolled around during all those moves. As an essentially untouched Triumph Speed Twin, it's an exceptional time capsule.

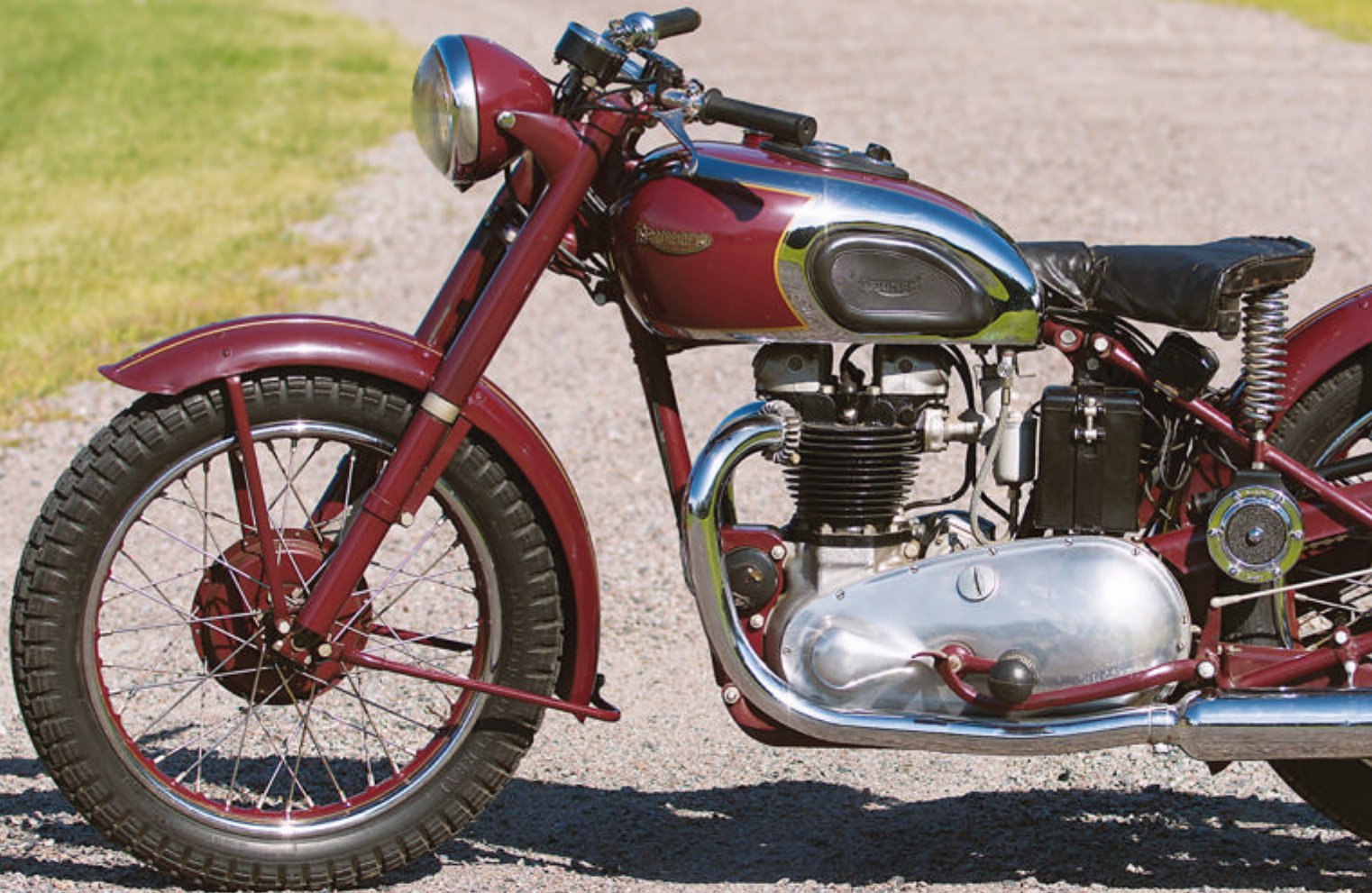
Beginnings of the twin

Triumph built an experimental 600cc side-valve vertical twin engine in 1913,

but World War I disrupted further development. Unfortunately, not much is known about this early twin-cylinder powerplant.

Then, in the early 1930s, seminal motorcycle engineer and designer Val Page drew another twin for Triumph, which they dubbed the 6/1 (see *Motorcycle Classics*, May/June 2013). It had a short life, being built only from 1934 to 1936. Page also designed a range of Triumph singles with 250, 350 and 500cc side-valve and overhead valve configurations. None of these Triumphs were inexpensive to produce, and by the mid 1930s the company was facing financial turmoil.

Jack Sangster owned the Ariel motorcycle company at this time, and had



earlier employed designer Edward Turner at his factory. In Triumph's travails, Sangster saw an opportunity to purchase the foundering company, and he moved designer Turner from Ariel to Triumph. Page had already left Triumph, taking his considerable design talents to rival maker BSA.

In 1936 at Triumph, Turner became chief designer and managing director. His first exercise was to take the three Page-designed overhead valve single-cylinder machines and dress them up with a sportier image. The result was the 250cc Tiger 70, 350cc Tiger 80 and 500cc Tiger 90, all with polished alloy primary cases, chrome plated gas tanks with silver-sheen painted side and top panels and purposeful looking high-level exhaust systems. The frames were rigid, and front suspension was supplied by a set of girder forks. These singles were popular sellers, but Turner had something else in mind for Triumph; an entirely new twin.

Starting fresh

For his new engine, Turner drew a twin-cylinder with a vertically split crankcase housing a single, central flywheel. The 498cc engine featured a 63mm by 80mm

bore and stroke, with its crankpins "in line" so both pistons rose and fell simultaneously. This means the cylinders fire alternately, with power impulses spaced evenly at 360 degrees.

Early Speed Twin engines are fitted with a six-stud cast iron barrel. The cylinder head is also of cast iron, with separate alloy boxes housing both the rockers and valve adjusters. Camshafts are situated high in the crankcase, gear driven through an idler gear by the right side of the crankshaft. Separate pushrod tubes run fore and aft of the cylinders, with ignition supplied by a Lucas twin magneto/dynamo mounted on a cast platform to the rear of the engine.

Turner dropped his parallel-twin engine into the heavyweight Tiger 90 single-cylinder cycle parts, which were painted Amaranth Red, and the 5T Speed Twin was born.

Triumph introduced the Speed Twin in July of 1937 at the Olympia Show in London, England. It was a sensation, and Turner's compact twin-cylinder powerplant ultimately influenced Britain's entire motorcycle industry. The major competition, including BSA, Norton, and Royal Enfield, all eventually produced their own parallel twin engines.

Upon its introduction, Turner's twin-cylinder engine looked very similar to what would have been a conventional twin-port single-cylinder, without being much wider or heavier. The twin made only four more horsepower than Triumph's 500cc single (28 horsepower compared to 24 horsepower). But the power delivery of the twin rivaled that of the single; it was much more refined, with better torque and pull from low speeds, plus it was easier to start.

In 1938 the Speed Twin model sold very well when it was finally available for public purchase, although there was some trouble with the original six-stud barrel to crankcase fixing configuration. An eight-stud pattern was introduced in 1939.

The frame, forks, fenders, toolbox, gas tank panels and oil tank were all red (Triumph's Amaranth Red is a deep red with a hint of purple). A gas tank-mounted instrument panel held an amp gauge, headlamp switch, inspection lamp and oil pressure gauge. For 1938 and 1939 the panel was made of Bakelite, which cracked easily. It was replaced in 1940 with a stamped metal item.

Chrome wheel rims, a WM2 x 20-inch at the front and WM2 x 19-inch at the



1948 TRIUMPH SPEED TWIN

Engine: 498cc air-cooled OHV parallel twin, 63mm x 80mm bore and stroke, 6.5:1 compression ratio, 28.5hp @ 6,000rpm (claimed)
Top speed: 85mph (est.)
Carburetion: Single Amal 276 15/16in bore
Transmission: 4-speed, chain final drive
Electrics: 6v, magneto ignition
Frame/wheelbase: Single downtube cradle frame/55in (1,397mm)
Suspension: Telescopic forks front, rigid rear
Brakes: 7in (178mm) SLS drum front and rear
Tires: 3.25 x 19in front, 3.5 x 19in rear
Weight: 374lb (170kg)
Seat height: 29.5in (749mm)
Fuel capacity: 4.76gal (18ltr)
Price then/now: \$450 (est.)/\$7,500-\$12,500



The Smiths speedometer reads just 49 miles from new (top right). The top of the fuel tank also houses the headlight switch and oil and amp gauges (above).

rear, had their centers lined in red, highlighted by a thin gold pinstripe on each side. The 8-inch Lucas headlamp shell was chrome plated.

There were very few changes between 1939 and 1940, with the exception of the addition of helper or check springs on either side of the girder fork. For 1940, the gas tank capacity increased to nearly five U.S. gallons, and a color option of black and chrome (rarely chosen) with ivory lining was offered.

After the war

Civilian production ceased in 1940 following England's entry into World War II, resuming following the end of the war for the 1945 model year. Changes included automatic ignition control and hydraulically dampened telescopic front forks, and the front wheel was reduced in size to 19 inches.

Further changes included fitting a smaller 7-inch headlight, and separating the generator from the magneto. The generator moved to the front of the engine cases, and the magneto — now a BT-H — stayed at the rear. The powerplant was further tidied up as the external rocker box oil drain tubes were removed. Oil was now routed through

drilled oil passages in the cylinder head and cylinder block.

From 1945 to 1947, Triumph did all it could to simply meet demand for the Speed Twin, and there weren't many changes in specification through those post-War years.

According to Harry Woolridge, who wrote *The Triumph Speed Twin and Thunderbird Bible*, in 1948 there were no alterations to the engine. However, Woolridge wrote: "... during the season year (1948), several changes took place to the motorcycle parts. Due to circumstances beyond the company's control, these changes could not be introduced at the onset of the season, but were brought in as and when convenient."

Sid's Twin

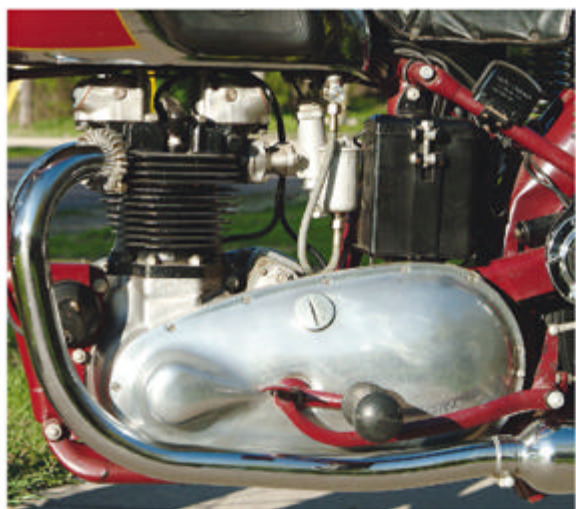
And that brings us to Sid Chantland's low-mileage Speed Twin. Going by the engine number, his motorcycle was built towards the end of 1947 as a 1948 model. Because it's early in the production run, Sid's Triumph features the original-style rear fender. One of the 1948 changes Woolridge spoke of — introduced when convenient — was an updated rear fender. This was wider, and there were only two stays on each side as opposed to

three, as seen on Sid's machine. To gain access to the rear wheel, this new fender could be unbolted under the saddle, and the entire section lifted away. To accommodate the updated fender, the rear subframe was also altered.

Sid's Speed Twin was fitted with the rigid rear hub as opposed to Triumph's new Spring Wheel, or sprung hub. Designed by Turner in 1938, the sprung hub allowed the rear wheel a total of approximately two inches of up and down movement on the wheel spindle. It didn't make its first appearance until 1946, and was finally available in 1948 as an extra charge option.

When a Speed Twin came equipped with the sprung hub from the factory, the gearbox was modified to accept an external speedometer drive. The drive would normally have been found on the right side of the rigid rear hub. However, with a sprung hub, the speedo cable was driven from the rear of the final drive sprocket.

Sid's Triumph did come, however, with the updated gearshift lever. The update? A rubber cover to protect the rider's boot or shoe. Also in 1948, Triumph updated the headlight with domed glass, and spark plug caps became standard



The 498cc parallel twin was rated at 28.5 horsepower at 6,000rpm. This particular Speed Twin came with the updated gearshift lever; a rubber cover to protect the rider's boot or shoe.

equipment. Sid's machine reflects these changes.

Triumph went on to update the Speed Twin over the years, including changing to alternator electrics in 1953 and adopting a sprung frame in 1955. The 5T Speed Twin ran until 1958, when it was replaced with the 5TA Speed Twin. The 5TA ran until 1966.

Safe travels

Sid's Triumph was shipped from Meriden to Al Shirer's shop in late 1947 or early 1948. Why it was never uncrated

and sold is a mystery, but Shirer managed to squirrel the Triumph away. An article in the September 1979 issue of *Motorcyclist* about "eclectic collectors" includes a photograph of Shirer standing on the seat of a Maico scooter surrounded by a myriad of other machines and detritus. According to the article, Shirer had hoarded motorcycles away in numerous locations.

Ronald W. Krause of Emmaus, Pennsylvania, eventually acquired Shirer's estate (Krause was one of the first Honda motorcycle dealers in the

U.S.) and on Oct. 22, 1984, he held an auction to liquidate the machines. In 1984, Sid was serving overseas in Germany, but his dad, Bob, and brother Scott attended Krause's auction.

"That was quite an auction," Bob says as he recalled the event. "If it were held today it would be a food fight." There were several Indians sold, plus a number of Harley-Davidsons, BSAs and Triumphs, including the Speed Twin. "I don't clearly remember seeing Sid's Speed Twin at that auction, but that's where it came from before it went to Japan."

Fast forward to June 2008, when Sid and Bob traveled to Monterey, California, for a motorcycle auction. "I must have walked past the Speed Twin 50 times," Sid says, "but I ignored it because I thought it was just another restoration. Then I started reading about it in the auction catalog, and it stated it was brand new, and came from the Al Shirer collection. I got up to look at it, and sure enough, it was an all-original motorcycle."

The Speed Twin crossed the block early in the day, and Sid won the bidding. "It's 100 percent accurate," he says. "It's got the instructions about the battery under the battery lid, the original tool kit and the original tire pump. I think the rear tire has been changed, but that's probably because the original would have gotten a flat spot from sitting in the crate all those years."

"It's got oil in it, and it turns over, but I have no interest in riding it. I wouldn't mind starting it up, but I don't think I'd ride it."

It's an amazing piece of history, as most Speed Twins have been, at least by now, restored two or even three times. "What these bikes were really like originally sort of gets lost in translation," Sid says. "For all of the miles this Speed Twin has traveled, it's as close to perfect as could be." **MC**



Sid's Speed Twin even came with the original tool kit and tire pump.

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SECOND LOOK

Getting some road time on Royal Enfield's new Continental GT

Story and photos by Richard Backus

First impressions are only that. An hour or a day with a bike rarely tells the whole story. A new bike can feel great on that first, short ride, but a week or a month of riding often tells an entirely different tale — and not always a good one.

In 2014, Royal Enfield introduced a game-changer in its previously staid line of retro machines — the Continental GT. Inspired by the 1965 250cc Continental GT produced by Royal Enfield in England, the new GT is the most adventurous offering yet from Royal Enfield in India, which has staked its export future on retro classics powered by simple, single-cylinder engines designed to invoke memories of the original Enfield Bullet. Royal Enfield CEO Siddhartha Lal believes the mid-sized motorcycle market has lots of room for growth, and he thinks bikes like the Continental GT have a bright future thanks to their relative simplicity, accessibility and affordability. He's backed up that belief with a new state-of-the-art, 200,000-square-foot factory in India's Oragadam industrial region, where the new GT is built.

At \$5,999 the GT is priced against bikes like Honda's new CB500F twin, a far more technically advanced half-liter sport bike powered by a liquid-cooled twin. While the new GT is the most advanced machine yet offered by Royal Enfield India, technology-wise it's hardly on a par with the best from Japan.

Alan Cathcart sampled the GT for our January/February 2014 issue following its U.K. debut and came away impressed, noting the bike's relaxed performance and solid handling, the latter thanks to famed chassis builders Harris Performance in England, who designed the GT's all new frame.

I had the opportunity to flog a new Continental GT during the model's U.S. launch in May 2014, and my first impressions of the GT were almost uniformly positive. In a day of riding with Lal and a dozen-plus other journalists in the hill country outside Temecula, California, I found the GT to be a capable low-speed, sporting motorcycle with excellent handling and a huge fun factor. In 175-odd miles of hard riding, not one of the bikes in our



crew so much as hiccupped, and squeezing every ounce of performance I could out of the 535cc single still returned 52mpg for the day's ride. I was impressed by the GT's brakes and suspension dynamics, and it didn't matter that it wasn't powerful. In fact, it was fun precisely because of its modest power, which forces the rider to really work it to get the most out of the GT.

That one day was fun, but we were interested to see if we'd enjoy it as much after a month of riding.

We got our wish, taking delivery of a new Continental GT to ride at our pleasure. Over the course of a few months, we put over 1,000 miles on our GT, riding it in a variety of settings ranging from urban cruising to commuting, running back streets,

"There's no arguing that Royal Enfield got everything right in the styling department — the GT's café racer profile is nigh on perfect."



two-lane country roads and four-lane highways. We rode it on dirt roads, in the rain, and in temperatures ranging from 30 degrees F to 85 degrees F to see what it's really like to live with.

What it isn't

So what do you get for the money? If you're interested in the new GT, it's important to understand what it is and what it isn't, and it definitely isn't a road or touring machine. It's certainly capable of 70mph cruising, but running at that speed for anything more than a few miles is not what you'd call effortless. Royal Enfield claims 29 horsepower at 5,100rpm for the GT. That's not exactly powerful by modern standards, and it means keeping up with traffic on the super slab requires lots of planning. Level roads are no problem, but when hills approach you have to wring the thumper hard, because you lose speed rapidly as you climb. 70mph suddenly drops to 65, then 60, and when the world around you is going 80mph it can be a little nerve-racking.

Worse yet is the vibration at 60-65mph, a common speed on secondary highways. At those speeds the single is turning an indicated 3,000-3,500rpm. That puts it in its sweet spot torque-wise (max torque is 32.5ft/lb at 4,000rpm), but it also happens to be where the single produces the most vibration, hopelessly blurring the mirrors, not to mention the speedometer and tachometer. The vibration-induced numbing in the rider's hands gets so bad you have to either slow down and drop the revs under 3,000rpm or speed up and get them over 4,000rpm. Either end of the spectrum gives relief, but either way, steady-state "high speed" cruising is not the GT's strength.

What it is

Where the GT shines is on small, two-lane roads where road and engine speeds change frequently. Working through the gears, keeping the engine on the boil for short blasts before easing the throttle to work through a turn and set up for the next



2015 ROYAL ENFIELD CONTINENTAL GT

Engine: 535cc air-cooled OHV single, 87mm x 90mm bore and stroke, 29.1hp @ 5,100rpm (claimed)

Top speed: 80mph (indicated)

Fuelling: Keihin electronic fuel injection

Transmission: 5-speed, chain final drive

Electrics: 12v, digital electronic ignition

Frame/wheelbase: Dual downtube steel cradle/53.5in (1,360mm)

Suspension: 41mm telescopic forks front, dual Paioli shocks w/adjustable preload rear

Brakes: 11.8in (300mm) Brembo floating disc w/2-piston caliper front, 9.4in (240mm) disc w/single-piston floating caliper rear

Tires: 100/90 x 18in front, 130/70 x 18in rear

Weight (wet): 405lb (184kg)

Seat height: 31.5in (800mm)

Fuel capacity/MPG: 3.6gal (13.5ltr)/58mpg (avg/observed)

Price: \$5,999



short bit of straight road, the GT feels like a different machine. The vibes are still there, but since you're constantly working through them they don't tire you like they do running on the highway. It's surprisingly sure-footed in tight turns, and you can enter a corner with more speed than you might expect. It's hard to get into trouble, because if you think you're going too fast, the excellent brakes will haul you down to speed rapidly. Likewise, the engine's modest power makes it almost impossible to get in trouble powering out of a turn, and its reasonable torque makes it feel faster than it actually is. Those same mid-revs that tingle on the road suddenly feel strong.

It's also a spectacular urban machine, perfect for short hops to the store, coffee shop or bar, where it always draws lots of admiring glances. There's no arguing that Royal Enfield got everything right in the styling department — the GT's café racer profile is nigh on perfect. The paintwork

is excellent and the chrome (even if some of it, such as on the turn signals, is plastic) shines. Our bike's yellow bodywork looks great with the yellow springs on the Paioli shocks, and the yellow stitching on the black seat is the perfect touch, giving the GT a custom, high-end look.

The rearset foot controls look and feel the business, and the hand controls are simple and logical. The starter spins the single effortlessly, and while we experienced some hard starting in cold

weather the thumper otherwise fires up almost instantly, requiring only a little warm up before moving off: Fuel injection has its benefits. Clutch effort is very light, and the transmission never balks, never grinds, and never misses a shift, whether going up or down through the gears. Neutral was occasionally hard to find at a stop, but that only happened when the engine was hot, and even then not frequently.

The suspension is better than anything Royal Enfield has



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The GT's 535cc single-cylinder engine keeps the bike simple and narrow; its widest girth is where the muffler kicks out at the rear.



offered before. Gas-charged Paioli piggy-back reservoir shocks look after the rear suspension, while the front carries 41mm telescopic forks. The ride is definitely on the stiff side, which might be an issue for some. Adjustable damping on the rear shocks (they're adjustable for preload only) would help, as it's the back end that delivers the harshest jolts. The front forks do their job very well, giving predictable and smooth control.

Some reviewers — including Cathcart — were less than impressed by the brakes, but we were hard pressed to fault them. They're nicely balanced thanks to the combination of a dual-piston single Brembo disc up front and a locally-sourced single-piston disc rear. And like the GT I rode in California, our long-term bike proved frugal to run, returning a low of 50mpg on a particularly windy day and averaging 58mpg in our 1,000 miles of running. Riding the GT hard doesn't appear to influence mileage one bit, because it doesn't seem to change whether you're

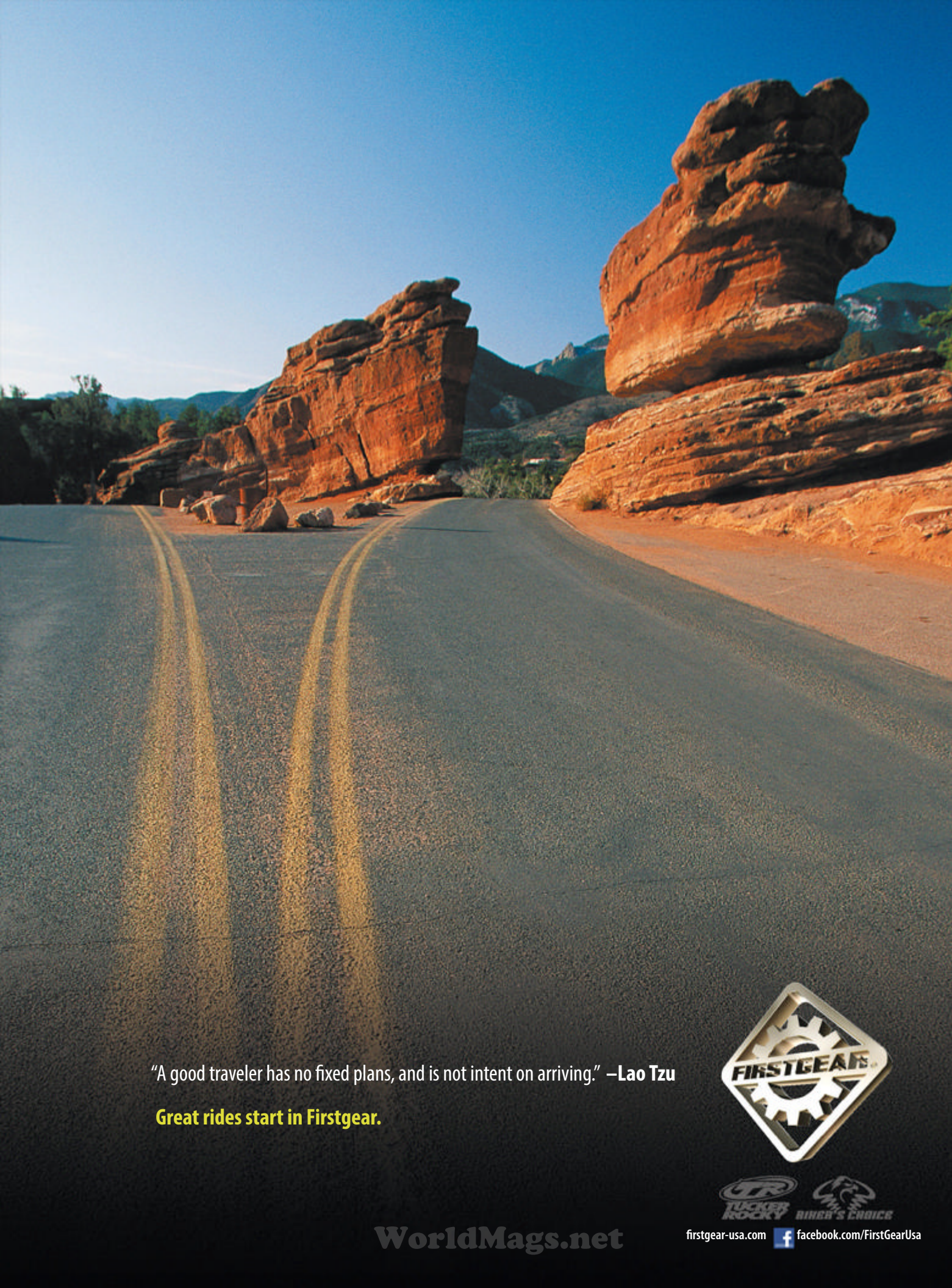
flogging it on local back roads or cruising sedately around town.

We didn't have a single mechanical issue with our GT, something we couldn't say about the Bullet we had back in 2005. This is an important machine for Royal Enfield, because it proves the Indian company can build reliable and capable machines for riders wanting a good looking, easy to own and easy to ride motorcycle that also delivers the key attribute of any good motorcycle, fun.

After a month and 1,000 miles of riding, we were still happy to throw a leg over the GT, proving to us that it's a machine that returns the goods, day after day. **MC**

The GT loves two-lane country roads, where its competent chassis shines.





"A good traveler has no fixed plans, and is not intent on arriving." –Lao Tzu

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THEORY IN MOTION

1977 MV Agusta Ipotesi



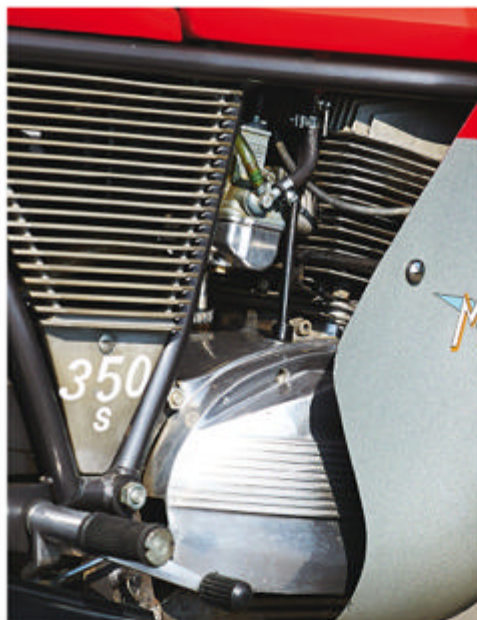


Story by Margie Siegal
Photos by Nick Cedar

Ipotesi, in case you're wondering, is Italian for "hypothesis." "I saw it translated as 'hypertensive,'" says Ipotesi owner Danny Aarons. "Hypertensive fits its character better; I've never heard a credible story as to why MV used that name."

One could guess. In your imagination, you're out for a morning's ride through the foothills east of Lake Como on the Italian-Swiss border, and you come across an insolent rider on a large, multi-cylinder bike from Japan. You, however, are riding your Ipotesi, a machine designed to prove that handling can beat horsepower: That is its hypothesis. The proud yokel cannot power his heavy machine through the turns as quickly as you can hustle your MV Agusta, and your light, agile 350 dances up and down the hills, leaving the multi in the dust.

The MV Agusta saga starts in the rubble that was Italy after World War II. The Agusta company manufactured aircraft for Mussolini's forces during the conflict, and was now out of business. To keep their workers busy, Vincenzo



The 349cc air-cooled parallel twin hides behind the full fairing. An overhead valve design, it's fed by a pair of 24mm Dell'Orto carbs.



1977 MV AGUSTA IPOTESI

Engine: 349cc air-cooled OHV parallel twin, 63mm x 56mm bore and stroke, 9.5:1 compression ratio, 34hp @ 8,500rpm (claimed)
Top speed: 103mph (period test)
Carburetion: Two 24mm Dell'Orto VHB248
Transmission: 5-speed, chain final drive
Electrics: 12v, electronic ignition
Frame/wheelbase: Single downtube w/engine as stressed member/52in (1,310mm)
Suspension: Telescopic forks front, dual shocks w/adjustable preload rear
Brakes: Dual 9in (230mm) discs front, single 9in (230mm) disc rear
Tires: 90/90 x 18in front, 90/100 x 18in rear
Weight (dry): 352lb (160kg)
Seat height: 30in (762mm)
Fuel capacity/MPG: 4.17 gal (19ltr)/50-60mpg
Price then/now: \$2,292/\$6,000-\$10,000



had become head of the company, was completely devoted to racing: Racing added glamour to the street bikes, and profits from the street bikes paid for the race effort.

Things, of course, change. By the late Sixties the aircraft arm of Agusta was

again in business, profitably making well-regarded helicopters. Italian workers could now afford a small car instead of a motorcycle, and motorcycle sales — and profits — were down.

When Domenico died in 1971, the passion to make and race motorcycles died with him. Slowly, the motorcycle arm of the Agusta company started to wind down.

MV's eventual shutdown was hastened by financial difficulties suffered by all branches of the Agusta industries in the mid-Seventies. The Italian government was willing to prop up Italian industry if the company met certain requirements. In the case of MV Agusta, the requirement was to stop making (and racing) motorcycles and concentrate on helicopters.

Agusta and his brother Domenico turned to manufacturing motorcycles in 1945. MV quickly became involved in racing, winning the Italian Grand Prix in 1948.

For years the bright red "fire engines" built near the Italian town of Gallarate led the competition, with legends John Surtees, Mike Hailwood, Phil Read and Giacomo Agostini holding the handlebars. In 1956, 1958, 1959 and 1960, MV won all four Grand Prix displacement classes. The 37 stars in the Ipotesi's logo recall Agusta's 37 World Championship wins.

The street MV's were totally unlike the multi-cylinder Grand Prix racers. Geared for the Italian worker, they were small but very pretty single-cylinder bikes that were simple to repair.

It all worked well for over 20 years. Domenico Agusta, who





A modern twin

Yet in something of a last gasp, MV Agusta turned to Ital Design's Giorgetto Giugiaro, highly regarded as a designer of Alfa Romeos, Lamborghinis and Ferraris, to come up with a sporty, modern 350. Giugiaro set himself to the task, and the result was the very handsome and decidedly modern looking Ipotesi twin. The engine was MV's tried and true 350 twin, but to make it look new Giugiaro designed new squared-off clutch and primary covers to match the straight lines he designed for the bike. Similarly, the castings for the cylinder and cylinder head were changed, now sporting squared-off fins to echo the angular bodywork, which included side covers designed to ape the cylinder fins.

The Ipotesi made its first appearance at the Milan show in 1973, where it was well received by attendees and the motor-ing press. But then, as was not uncommon for Italian bikes in the era, it disappeared for a year and a half. The production Ipotesi finally appeared in Italian and English dealers' showrooms in 1975, in both naked and faired versions, with faired bikes going mostly to England.

MV claimed a surprising 34 horsepower for the pushrod twin. The secret was in light valves and valve gear, short pushrods and an over-square 63mm x 56mm bore and stroke. Excellent breathing was aided by the sporty exhaust, and testers consistently revved the machine to over 9,000rpm, with some opining a safe limit of 10,000rpm.

With a claimed dry weight of 352 pounds, the 349cc twin could achieve respectable quarter-mile times of 14.83 seconds, with a terminal speed of 89.46mph and an absolute top speed of 103mph. "Performance is good by any standards and exceptional for a 350," said England's *On Two Wheels*.

The frame consisted of two top rails running the length of the bike, joined at the tail above the number plate at the rear and below the headstock at the front. A single downtube

bolted to the engine, which was a stressed member of the frame. Front and rear suspension were by Ceriani and the triple disc brakes were by Scarab; alloy wheels reduced weight while adding panache.

"The suspension gives the MV a ride like a steel-wheeled skateboard," said England's *Superbike* magazine in 1975. "Handling is not something you think about with this bike: it is the rider and the tires, with nothing in between to conceal the deficiencies of either," added *On Two Wheels*.

Yet while contemporary magazines were enthusiastic about the bike's speed and handling, its high price and the cheesy finish of the bodywork and some parts put them off. Complaints included the thin fairing, which was not firmly attached to the frame and shook at speed, the noisy exhaust, and the kick-start lever, which broke on one test bike. "It emerges as a true superbike," said *Superbike*. "It's not flawless, but it's still a gem, and you have to pay for gems."

Another common complaint was vibration. Ipotesi owner Danny Aarons feels this fault is overstated. "Two owners warned me off the bikes for exactly that reason. In reality, I've found that for bikes in its class that I've ridden, it's

about mid-pack. It's much smoother than the Honda CB350 I once owned and not as smooth as a Morini 3-1/2 or a Yamaha RD400. It's roughly on par with my Triumph 500 but vibrates at a higher frequency and lower amplitude. It's much smoother across the board than my old BSA Shooting Star, for what that's worth."

Ipotesi production was slow, with a lot of starts and stops that discouraged would-be buyers. Danny estimates MV built 600-700 Ipotesis a year from 1975 to 1977. Changes from model year to year were few, the major one being a switch from chrome to black mufflers. Eventually, 1,976 were built. In the meantime, the Agusta company had wound down its motorcycle division, officially closing the doors in 1980.

"It's not flawless, but it's still a gem, and you have to pay for gems."



Danny Aarons' Ipotesi

The Ipotesi was not officially imported to the United States. Contrary to DOT regulations, the bike shifts on the right (one up, four down), the mufflers are certainly too noisy, and there are no turn signals or mirrors. However, in the 39 years since the Ipotesi was first built, some have turned up here, imported by MV enthusiasts and Italian bike collectors.

Danny Aarons, the owner of our feature bike, is a long time Italian bike enthusiast. "When I was 15, I wanted to buy a motorcycle and of course had no money. I stumbled upon a Ducati 250, a completely clapped out Diana. It was gobs of fun. Time went by and I bought other bikes, but that Ducati spoiled me. It just felt like home." Presently, Danny has 10 runners (including the Ipotesi), plus two bikes that are close to running and three projects. "I was always into things mechanical. I grew up in the hills, building and racing bicycles, then got into motorcycles. It seemed like the right way to get around."

Danny first saw an Ipotesi in person when a fellow enthusiast put his up for auction. When he saw the bike in Monterey, California, he thought, "That's beautiful!" That set the hook. "I kept it in the back of my mind," Danny says. "Two years ago, I started actively looking for one, preferably with the fairing and in the U.S. I am not sure what inspired that. I looked in the usual Italian motorcycle sources for six or eight months. Finally, I posted my quest on a Ducati listserv and got four or five leads. I found this one in a collection in Colorado. I went out to look at it and fell in love."

The bike had about 5,200 miles on it and had been sitting in different collectors' warehouses for years. "It was indoors its entire life," Danny says. Rust, of course, never sleeps, and rubber

and oil disintegrates with time, no matter how carefully a bike is kept. The cosmetically sound Ipotesi needed TLC to get moving.

Danny's first step was to replace the tires, oil and brake fluid. He rebuilt the front brakes, replaced the fork seals on the 32mm Ceriani forks, and installed a new battery. "Just basic stuff," he notes. He also rebuilt the automatic petcock and repacked the wheel bearings. Although most bodywork is unobtainable, Danny found a source in Europe for footpeg and other rubber parts.

The Ipotesi now sees the light of day on a regular basis. Danny has put about 2,500 miles on his little classic, mostly on the secondary roads in the hills near his home. "It's really a

pleasant ride. Although it's not a long distance mount, I've never felt fatigued from vibration on a typical 50-mile ride. It's a little buzzy, but quite pleasant. Even the aftermarket bar-end mirrors are usable!"

Maintenance is eased by the Ipotesi's electronic ignition, and while Danny has been told the 24mm Dell'Orto square slide carburetors are problematic, he's had no trouble with them. The most common chore with the Ipotesi is changing the oil. As the Ipotesi has a wet clutch that runs in engine oil, an oil screen instead of a filter — and the generous tolerances of an air-cooled engine — frequent oil changes are a must, so Danny changes the oil every 1,000 miles. The head has started weeping a bit of oil, and he hopes torquing it down will take care of it. Tires are also a bit of an issue, as the Metzlers fitted by the factory were discontinued a long time ago. Danny is running Avon Roadmasters. "Avon is the only company making serious tires in 90/90 x 18-inch and 90/100 x 18-inch."

The Ipotesi will start on the first or second kick, provided you follow the starting drill. Despite being rebuilt, the "automatic"

"I learned to ride differently. I learned to carry speed into turns."

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Owner Danny Aarons enjoys the precise, light handling of his Ipotesi.

petcock (it's an electrically-activated solenoid) on Danny's bike doesn't work well, so he starts by turning on the manual tap, which is supposed to be the reserve. Next, he flips on the choke, then makes sure the clutch is free by pulling the clutch lever and kicking through a few times. "It doesn't hang up," he says, "I just do it from force of habit."

Then it's key on and kick, once or twice. The fairing interferes with the kickstart lever, so Danny keeps his foot on it to keep it from swinging back and smashing the fairing. "The frame is perfect — everything else was an afterthought. It has the same switches I used to throw out on old Ducatis."

The MV roars to life and Danny and his 350 swing out onto the road, where, he says, it shines. "It has incredibly precise, light handling. I'm used to riding big bikes, where you are committed to a line. With this bike, you are not committed to a line through turns. It does what you think about. It loves tight twisties. The tighter the road, the faster it goes." Amazingly, it is also good on gas: Danny reports 60mpg, and period tests support that figure.

"With the MV, I learned to ride differently," Danny says. "I learned to carry speed into turns. I can go on a twisty road and never use the brakes. The brakes, by the way, are very good by the standards of the day. They are teeny Scarabs only used on this



bike and one other Italian machine, but they are quite competent. In its day, it was the fastest production 350 you could buy, good for 103mph. That's not true anymore, but the Ipotesi is so charming and so fun to ride." Quite the compliment for a bike now pushing 40, but then again, it is an MV Agusta. **MC**

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DUCATI PANTAH





Darmah Dave and his 1981 Ducati Pantah 500SL

Story by Anders Carlson
Photos by Jody Spychalla

You only get one first love, and no one's counting after that. But if you remember your first, you'll never know which one's your last. Best to keep a restless heart, and be fickle with devotions, especially with old bikes.

"Darmah" Dave Eulberg's love affair with 1970s-era Ducatis happened the way it often does. From a bored 15-year-old dirt-biking on a Montana farm, bikes became a flourishing addiction in progress. From Honda CB350 rebuilds in his parents' basement, Dave became a Honda dealer technician whose eyes were drawn to the Superhawks and Hawk GTs he'd work on. Forsaking reliability and embracing a problem-solving nature, he purchased his first English bike, a 1977 Triumph Bonneville. And if you can love old English iron, you've got an inside track to an unhealthy obsession with vintage Italian twins. Enter the less glamorous Ducatis of the 1970s.

Though Dave's first Ducati was a 1978 SD900 Darmah, his hunt for a second Ducati began as an interest in vintage racing took hold. After a track day on the Darmah, Dave realized he'd better start looking for a Ducati that was more suited to racing. Unable and unwilling to shell out ransom-like amounts for a 750GT or 900SS, Dave settled on the lesser-known Pantah. But trying to secure a Pantah means lots of searching and little finding.

Beyond scanning Craigslist or eBay, leads came from a well-cultivated network of fellow riders and old acquaintances. After a few months of pounding the pavement, Dave's search finally paid off. He found his Pantah in Tennessee in the fall of 2013. He brought it home to Illinois on a December day during the worst Midwestern winter in a generation. He was pleased to find it nearly mint aesthetically, but in need of work to make it road-worthy. Having been part of a collection, the Pantah had sat for a number of years. "Cryogenically stored" in Dave's garden shed, it would sit for another month and a half before a light recommissioning could begin. Though he didn't anticipate finding an almost 100 percent period-correct example, it was the only one for sale at the time. Understanding the value of the bike he'd found, Dave decided to stay on the lookout for a less pristine example to race.

From the beginning

How Dave's Pantah came to be is almost as interesting as how the bike itself came into existence. The Pantah is best understood as a collection of firsts for Ducati. Almost everything about the Pantah had shown up on previous Ducatis, just not together in one package. Ducati's innovations and ingenious designs in the 1970s were paired with poor sales figures and even worse marketing decisions. The Pantah was born from improbable triumph and colossal failure.

The triumph was Mike Hailwood's amazing 1978 TT win. It's hard to over dramatize the impact of his win, both in terms of



1981 DUCATI PANTAH 500SL

Engine: 499cc air-cooled SOHC 90-degree V-twin, 74mm x 58mm bore and stroke, 9.5:1 compression ratio, 45hp @ 9,050rpm

Top speed: 115mph

Carburetion: Two Dell'Orto 36mm

Transmission: 5-speed, chain final drive

Electrics: 12v, electronic ignition

Frame/wheelbase: Tubular ladder frame/57in (1,448mm)

Suspension: Telescopic forks front, dual shock absorbers w/adjustable preload rear

Brakes: Dual 10.32in (260mm) discs front, single 10.32 (260mm) disc rear

Tires: 3.25 x 18in front, 3.5 x 18in rear

Weight (wet): 433lb (197kg)

Seat height: 31.2in (792mm)

Fuel capacity/MPG: 5gal (19ltr)/40-50mpg

Price then/now: \$4,549/ \$2,000-\$5,000



The original seat (above) is supple and still surprisingly comfortable today.

racing trends and prevailing wisdom. Hailwood's win on a bevel-drive 900 Super Sport helped dispel the notion that a V-twin was obsolete in an age of inline fours; Ducati ultimately sold over 7,000 Mike Hailwood replicas. But if Hailwood's historic TT win made a case for the continued relevance of V-twins, it did nothing to solve the problem of prohibitive production costs for the venerable bevel heads.

Time to modernize

Ducati had already spent the better part of the 1970s on that most un-Italian of endeavors — economizing. Ducati was trying to modernize their line and reduce production costs. While the square-case 860 and parallel twins produced between 1975 and 1983 were a success in terms of production costs, their

terrible market performance rendered this victory moot. The square-case 860s were a sales flop, largely due to their styling, while the parallel twins were an abject failure in almost every measurable metric. The parallel twins were underpowered and had a propensity to snap cranks. The styling cues taken from the 860s were the final nail in the coffin for the 500 GTL parallel twin, never mind Ducati engineer Fabio Taglioni's refusal to take part in its initial design.

Even before Hailwood's TT triumph, Taglioni had already been tasked with developing a new model. 1976 saw Taglioni given some measure of redemption in being asked to bring his belt-drive V-twin concept from 1971 back to life. The 500SL Pantah he'd develop would mark a departure from Ducati's established build practices and design concept. Its continued nod to cost considerations made perfect sense for a company looking to salvage its fortunes





while leveraging the legend-making success of Hailwood's TT triumph. More than just reflecting Ducati's racetrack success, the new Pantah aimed for success with the bean counters and the sales floor.

The Pantah was based, in part, on two existing Ducati race bikes, the 1973 Armadori 4-valve belt-driven twin and the 500cc bevel-drive Grand Prix racer of 1970. By smartly borrowing from both examples, Taglioni's last design for Ducati was a culmination of his life's work, uniting virtually all his innovations into one bike that would form the basis of almost every Ducati for the next 30 years.

The belt-driven cams, trellis frame and desmodromic valve actuation provided the soul of what we know as the modern-day Ducati. While the desmodromic valve system solved valve float problems in a mechanically complex manner, the belt-driven cams solved a different problem — an economic one, as the belt-drive system was far cheaper to produce and assemble than the bevel-drive.

Completing the initial model in less than six months, Taglioni built a 74mm x 58mm engine with 9.5:1 compression ratio. It followed the existing 90-degree twin cylinder layout with vertically split cases, but with desmodromic heads housing 60-degree angled valves as on the heads Taglioni designed for the parallel twins.

The swingarm pivoted on bearings in the gearbox casing, with the clutch primary now on the left side of the engine to facilitate the left gearshift placement. Absent was a kickstarter, with the starter motor neatly tucked under the now right-offset front cylinder. The belts and valve gear were on the right side, driven by a jackshaft spun by the crank on the left side, resulting in a narrow, 14.8-inch wide engine. A wet clutch connected to a

5-speed gearbox, and the trellis frame designed by Taglioni held the engine at six points.

The engine had a one-piece crankshaft with two-piece connecting rods running plain-bearing big ends. While the "Gilnisil" bore plating (a trade name of Nikasil) ruled out any reboring, the 500 platform easily translated into the subsequent 600 and 650 Pantah iterations. Initial prototypes used 32mm Dell'Orto carburetors, but production bikes including the 600SL that came a year later wore larger 36mm Dell'Ortos. Power output on the first 500SLs was quoted at 45 horsepower at 9,050rpm.

The start of 1978 saw a finished prototype, but Ducati's chaotic finances and management kept the Pantah from production until September 1979. Released simultaneously with the 900 Mike Hailwood Replica, only a small number were produced, in order to gauge customer demand. The first 163 were delivered in red and silver, with a telltale ".1" designation after the "DM 500L" serial number prefix.

The bike's reception was mixed. A May 1981 *Cycle* magazine test found the bike ran rich, with difficult starts on cold mornings. The airbox and overly rich jetting were singled out as the culprits, keeping the bike from performing well. Paired with a comically tall first gear, the Pantah seemed to regard the quarter mile as a juvenile standard of performance not worth its time. *Cycle* was able to coax a 13.66-second/98.14mph run out of their example, barely a half-second faster than a Suzuki GS450. The gearbox, however, was praised as superior to anything produced in Japan, smooth and with no missed shifts or false neutrals.

The Pantah today

They say it's only original once, and in terms of perfect as possible paint and finish, surviving Pantah 500s are few. Dave's

"Like a bored teenager the Pantah needs stimulation, but it flashes brilliance at the most opportune moments."



The belt-drive 499cc V-twin is just 14.8-inches wide and makes 45 horsepower at 9,050rpm, but little happens under 5,000rpm.

example proves the adage that you should always buy as much bike as you can afford. A light amount of sun fade brings out almost archaeological details, like the fact that too-large washers helped secure the fairing at some point. Yet a few tiny tears in the seat fail to detract from the original vinyl covering and foam, still supple and wearing the Ducati logo on the bum-stop seat.

Taking the Pantah out for a ride on a crisp, September day, the bike's charm takes a few thousand revs on the tach to become apparent. Like a bored teenager the Pantah needs stimulation, but it flashes brilliance at the most opportune moments. Dave's bike is beautifully sorted, but little happens before 5,000rpm

shows on the tach. Get to there, however, and it's all fun until the readily reached redline.

A tall first gear snicks easily into second, where the bike's coltish legs start to stretch. Soon, only the light wobble and vibration from the fiberglass fairing interferes with the restrained twin. In contrast to Dave's Dharmah, the Pantah is quiet, modest and poised. The Conti pipes don't bark as much as they repeat your marching orders, and even redlining just brings about a loud hum, making for a civilized impression.

The understated strength of the Pantah becomes apparent on winter-scarred Illinois roads. The Pantah seemingly can't take a bad line, and there's no crumbly pavement that can ruffle the fur of this cat. Being used to a wide inline four pushing the front tire into turns, the slim twin and trellis frame is a revelation. Several times I get too hot into a turn before I remember; duh, just lean over a bit more. It's as simple as that. The riding position is oddly comfortable to my 5-foot 10-inch Nordic build and limbs, and the rearsets offer a pleasing rider geometry, with some hand fatigue setting in after an hour or so. The rear fairing with its bum-stop looks fantastic, and despite the seat being about two inches thick and original, it's quite comfortable. The unfinished interior fiberglass environs of the front fairing are strangely pleasing, though vibration is a reminder of the bike's inherent minimalism. I ask Dave about the Napoleon mirrors he mounted, thinking it odd he'd choose modern mirrors since he's such a stickler for originality. "Oh, they didn't come with mirrors," he replies. Minimalism, indeed.

I'll take two

When a second Pantah came up for sale in Colorado, Dave finally had a track bike to go with his pristine, blue, original Pantah. Dave took a novel approach to transporting his new purchase back to Illinois. Deciding the extra gas money and slower speed of a trailer was unnecessary, Dave removed the interior of his Ford Focus hatchback and disassembled the bike in the previous owner's garage before stuffing it into his Ford for the trip back to Chicago. Mind you, he did it over the weekend, covering 1,800 miles in a little over 37 hours.

So what was the draw of the second Pantah that he went to all that trouble? "It has the period correct Verlicci handgrips and the original airbox," he explains. These final details were the last things needed for the first Pantah, making it original at last. Details like that separate mere survivors from something that could more accurately be called



The stability of the 500SL is obvious on the first ride down a pockmarked road.

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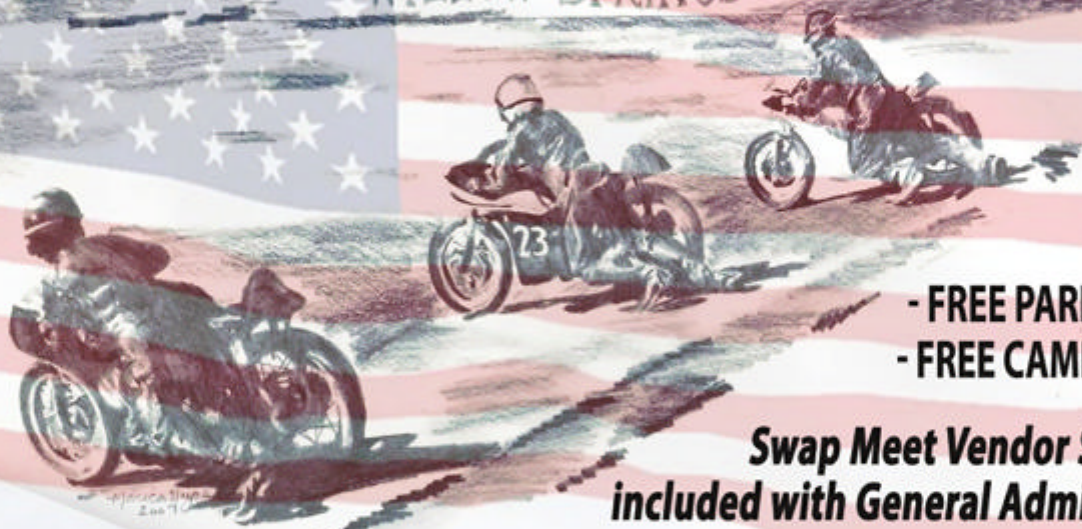
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a time machine. Yet the point isn't about going back in time, it's about dragging the past into the present. Riding a machine virtually unchanged from when it left the factory, it's possible to not just glimpse the past, but grab hold of it and make it live and breathe in the present. You can almost feel the same wind, hear the same engine whine and feel the same buzz under the pegs that someone else did in 1981. It's a priceless feeling — until you add up the receipts.

As for the "spare" Pantah, Dave painted it blood red and rechristened it as a track bike and AHRMA racer. Dave took sixth place with it at his first ever race, at AHRMA's Road America contest last June. Throw in a few track days and the red Pantah got to stretch its legs and get a right proper Italian Tuneup.

With the Pantah's strong race heritage, Dave's got the right idea. The 500SL and the 1981 600SL and 1983 650SL that followed it all had success on the track. The 500 was a capable production racer, notching the 1980 Spanish TT2 Endurance champi-



Owner Dave Eulberg has carefully revived his 500SL back to as close to original condition as possible.

onship, plus the German and Canadian championships for 500cc production motorcycles. The bloodline that began with the 500 reached its zenith with the TT2 racer of 1981 and the legendary TT1 750 of 1984. What they gave up in displacement they more than made up for with spectacular

powerbands mated to light and nimble-handling frames. If the Pantah was born from an exercise in economic modernization, it still provided a compelling platform for racetrack performance.

And the Pantah shown in this lovely pictorial? As I write, Dave's put out the word that he's thinking about his next project, and the lure of a round-case 750 GT is strong. He's not selling the Pantah at the moment, but future seeds are being sown. A restless nature demands new challenges and new projects. And beyond the search for new mechanical and historical projects, maybe a small part of it is looking for the next bike that makes the heart flutter a bit. After all, you never know which love will be your last. Motorcycle-wise, anyway. **MC**

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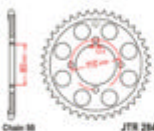


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BREGANZE'S BEST

Laverda SFC1000

Story by Robert Smith

Photos by Richard Backus

Blessed with relative prosperity in recent years, the Italian motorcycle industry has taken its place among the world's biggest and best. Small boutique builders soldier on, but Italian motorcycle production is today chiefly the province of two giants: Audi-backed Ducati and the sprawling Piaggio empire of Aprilia, Vespa, Moto Guzzi and the rest. It wasn't always this way.

Back in the 1970s, the manufacturers that had survived the introduction of Fiat's small and affordable car, the 500 (or Cinquecento) and the tsunami of Japanese imports were few — and forever financially strapped. Yet they persevered in a single-minded pursuit of style and performance above all else.

"To the outside world," wrote Gary Johnstone in his 1994 book *Classic Motorcycles*, "the Italians have an approach to motorcycle design that defies comprehension ... a flawed brilliance, the capacity to make a near-perfect motorcycle and turn it into a commercial disaster ... They go for glory and court chaos fearlessly."

So it was with family-owned Laverda, based in Breganze in the foothills of the Italian Alps. Never a volume producer, Laverda survived by being able to command a premium price for street versions of its highly competitive endurance racers. Through the 1970s, Laverda's 750SFC twin and 1000 Jota triple were the weapons of choice in 24-hour racing in Europe. The company intended its new-for-1977 mid-size 500cc, double overhead camshaft, 6-speed Alpino (Zeta in the U.S.) to support the same business model of "win on Sunday, sell on Monday." It even had its own race series, the *Coppa Laverda* (see March/April 2014).

But a perfect storm of factors — a slump in the European motorcycle market, crippling sales taxes at home, and a price premium over its competition of as much as 100 percent — conspired to stall sales of the innovative twin. It's reported that Laverda lost money on every one it built, probably because they couldn't achieve volume production.

So Laverda moved into the 1980s in serious financial trouble. The agricultural side of the family business was now part of Fiat, meaning any financial support from that arm was gone. The Laverda 500 was a flop, sales of the 1,000cc triples were slipping, and their design was looking dated. With no money to develop a new range of motorcycles, Laverda looked to update the triple





1986/1988 LAVERDA SFC1000

Engine: 981cc air-cooled DOHC triple, 75mm x 74mm bore and stroke, 10.5:1 compression ratio, 95hp @ 8,000rpm (approx.)

Top speed: 140mph (est.)

Carburetion: Three 32mm Dell'Orto PHF32

Transmission: 5-speed, chain final drive

Electrics: 12v, electronic ignition

Frame/wheelbase: Dual downtube steel cradle w/ rubber engine mounts/60in (1,524mm)

Suspension: Marzocchi 41.7mm M1R air-assist telescopic forks w/adjustable damping front, dual Marzocchi Strada remote reservoir shocks w/ adjustable preload and damping rear

Brakes: Dual 11.8in (300mm) discs front, single 11in (280mm) disc rear

Tires: 100/90 x 18in front, 130/80 x 18in rear

Weight (dry): 528lb (239.5kg)

Seat height: 31in (790mm)

Fuel capacity/MPG: 5.8gal (22ltr)/35-50mpg

Price then/now: \$6,000-plus/\$12,000-\$16,000



range, adapting and restyling the ageing 6-valve, double overhead cam air-cooled 3-cylinder engine to a new role as a sport-touring motorcycle. The result was the stylish and innovative RGS1000, which made its debut at the Milan show in November of 1981.

Beginnings of the RGS1000

The RGS was a real change from the earlier triples. Gone was the raw-edged muscle bike demeanor of the Jota: A 120-degree crank replaced the previous 180 for smoother power delivery and a more harmonious exhaust note, and the engine was rubber mounted in a new, lower frame to dampen out vibration. The RGS wore a sleek "tear drop" fairing with an automobile-style fuel filler cap built in, and there were luxury fea-

tures like fully-adjustable footpegs and an automobile-style dashboard with full instrumentation. A revised transmission replaced the clunky crossover shift linkage previously used, and the hydraulic clutch was improved; Laverdas had been notorious for a heavy clutch pull. Needle roller bearings were used throughout the transmission, dual simplex chains in the primary replaced a single triplex chain, and there were revisions to the ignition and the cylinder head. Laverda's own FLAM cast aluminum wheels were also replaced with similar items from FPS.

Though the RGS was a competent performer and considerably more user-friendly than the earlier 180-degree triples, it never really caught on. The bodywork, though aerodynamically efficient, was perhaps over-styled and





partially obscured what had always been the big triple's best feature — the engine. Perhaps recognizing this, Laverda produced a less expensive version, the RGA, with more abbreviated bodywork, and also a sporty version of this model, the RGA Jota. The RGS was also available with matching fitted luggage and hand protectors as the RGS Executive.

Looking for more oomph, British importer Keith Davies of Three Cross Motorcycles persuaded the factory to produce a performance version, the RGS Corsa. While the factory quoted around 83 horsepower for the RGS, the hand-built Corsa was rated at 95 horsepower, mostly from revisions to the cylinder head, including larger intake and smaller exhaust valves and ports, and the use of 10.5:1 pistons. Fewer than 200 RGS Corsas are thought to have been built, and none of the RGS/RGA range produced the volume sales figures Laverda needed to survive.

From RGS1000 to SFC1000

True to type, Laverda decided to go out with a bang instead of a whimper, making one last attempt at a breakthrough model, shamelessly recalling the famous SFC designation and producing perhaps their best bike ever.

The basis for the SFC1000 was the RGS Corsa engine and frame, still with the swooping bodywork, but with detail changes that transformed its appearance. The frame was painted gold and got a new Verlicchi-made box-section aluminum swingarm and remote-reservoir Marzocchi shocks with adjustable damping. Air-assist Marzocchi M1-R forks with adjustable damping — also finished in gold — were up front, and gold-finished three-spoke Oscan cast alloy wheels were fitted front and rear. A trio of Brembo Gold Line two-pot calipers took care of braking. The 3-into-1-into-2 exhaust system was finished in black, with a 3-into-1 system an option. The new steel gas tank featured two filler caps and an electric petcock, while the rider/passenger footpegs were mounted on a new milled aluminum plate finished in

gold with an embossed SFC logo.

The car-style instrument panel was replaced with a brushed aluminum plate housing black-faced (later white) Smiths or Veglia speedometer and tachometer, together with an oil temperature gauge and an array of warning lights. The bodywork was now made in fiberglass (replacing the Bayflex elastomer used on the RGS) and finished in red. What Laverda managed to reveal in the SFC1000 was its true heritage, producing a sophisticated, high-quality sport-touring motorcycle that looked like a race bike: it is now a sought-after model, and perhaps the best all-around motorcycle from Breganze.

There remained one further twist in the SFC's brief story. Uve Witt of German importers Moto Witt (who also designed and still makes an upgraded ignition system for Laverdas) requested a further batch to a slightly different specification. The Oscan wheels were replaced with laced-up wheels using Moto Witt's own hubs and Spanish Akront rims. These bikes were finished in black with white decals and used white-faced Veglia instruments. Some SFC1000s were also delivered with Laverda's RGC race kit, which included P1 racing cams, 36mm Dell'Ortos (32mm was standard) and a close-ratio transmission.

It's difficult to be precise about how many SFC1000s were made. Engine numbers run from 2800 to 3450, but SFCs were built concurrently with other 120-degree triples in the factory. At least 200, but probably fewer than 300 were likely built between 1985 and 1989. By this time the company was under "administration," with production transferred to a new facility in Zane, seven miles from the old factory in Breganze.

Dale Keesecker's SFC1000s: The black bike

Kansas farmer and bike collector Dale Keesecker owns two Laverda SFC1000s, a red 1986 model and one of the rare, black, spoke-wheeled German-market bikes from 1988. "I think back in their day they were the most beautiful motorcycle there was,"



The SFC's bodywork was similar to the earlier RGS, but it dropped the RGS' automotive-style, fairing-mounted fuel filler for twin tank-mounted caps.

it, it had around 2,000 kilometers on it. Slater had sold it new to a fellow in England and whatever his profession or job was took him out of the country, so he wanted Slater to sell it."

When the bike arrived in Kansas all the bodywork was taken off, but all it really needed was finishing to Dale's exacting standards. "We did a very extensive detailing, because it was so near perfect," he says. "We put new tires on it. We got a new stainless steel exhaust system and put that on it, and that's really all we did to it, along with changing all the fluids and servicing it."

The red bike

"I got it about three years ago," Dale says. The red 1986 came from Canada, and was sourced by Canadian Laverda parts guru Wolfgang Haerter of Columbia Car & Cycle. Wolfgang reminded Dale he had sent him a picture of a red SFC1000

Dale says. "I always wanted one, but they always kept eluding me. I'd find one and it had a lot of miles on it. Some had been restored, but they weren't quite correct, and you didn't know what was inside of them."

Dale acquired the black bike first. "Twelve or 14 years ago, I was reading in one of the British magazines that Slater Brothers in England had this one advertised on consignment. I called him [Richard Slater] up and talked to him for a while. He says, 'well, you found what you've been looking for.' I think when I got

some time back. "It was maybe 100 or 200 miles from his place," Dale says. Wolfgang knew the bike and also knew that it had been well cared for. Wolfgang contacted the owner and negotiations ensued. "Long story short, I ended up with it."

The red bike then got the full treatment. "Mechanically it was excellent," Dale says, "but some things had been changed on it. So from the frame up we did a total cosmetic restoration. Wolfgang gave me the paint code. We put a stainless steel exhaust system on it and the correct rear shocks. Luckily,



Seat cowl can be removed with three screws for two-up riding (top). Beautifully crafted rearsets were unique to the SFC1000 (bottom).

everything it needed, Wolfgang had. Every single nut, bolt, washer — if it was zinc plated or cadmium plated or chrome plated, that's how it went back."

The SFCs are not Dale's only Laverdas. "I've got a 750SFC that we restored, I have two Jotas, and I have two SF750s, one drum brake, one disc." Why Laverdas? "Because of their rarity," he says. "The first time I read in one of the motorcycle magazines about the Jota and how fast it was, and being a 3-cylinder with 180-degree firing order, it just fascinated me. And where Laverda had been in the implement business and I'm involved in agriculture."

Keesecker tells the story of having seen a Laverda combine being transported past his farm on a semi. "I could see it said 'Laverda.' I'd never seen a Laverda combine in our part of the country. It was kind of ironical. I've got these Laverda motorcycles and there's a Laverda combine going down the road."



What are the SFCs like to ride? "They're like most Laverdas. They have a high center of gravity, but they are fun. The engine is quite robust and you know you've got a lot of power there. They're fun to listen to," Dale says, but he's quick to add that "the 180 has the best sound. When you get them ramped up they're awesome. And I was a little bit surprised. I had read and I had always been told the 120s were quite a bit smoother than the 180s. I haven't found that to be. Yes, they're somewhat smoother, but not that much. The 180s — at least mine — don't buzz your hands like some of the Triumph triples. There's some vibration there, but at least for me, it doesn't put your hands to sleep or become really annoying."

"I like them both," Dale says of his SFC1000s, "they both have their character. Every time I walk by one, I have to stop and look at it." So is the SFC1000 the most beautiful motorcycle ever built? You be the judge! **MC**

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BIRDS OF A FEATHER





1966 Moto Guzzi Stornello ISD Trial

Story by Greg Williams

Photos by Jeff Barger

William Shakespeare certainly liked his birds. In fact, more than 600 varieties of our feathered friends are mentioned in his plays and sonnets. Of particular note, in *Henry IV, Part I*, Shakespeare mentions starlings.

Prior to the late 1800s, there wasn't a single starling in the United States. But thanks to a plan supposedly hatched by the American Acclimatization Society, every bird the Bard ever wrote about was to be released in America, and in 1890 approximately 100 starlings were given wing in Central Park. From New York City the birds quickly multiplied and spread across the country. To be blunt about it, starlings have basically taken over North America since.

Another starling introduced to the U.S. didn't have wings, though, and it didn't overtake the land. We're talking about the Moto Guzzi Stornello, and as you might have already guessed, Stornello is Italian for "starling."

The beginnings of Moto Guzzi

Moto Guzzi began building motorcycles in 1921, and almost immediately started racing their products. The company had multiple Grand Prix World Championships and Isle of Man TT wins, but due to declining sales and a 1957 ban on racing on public roads in Italy, Moto Guzzi quit competing that same year. However, that was only on the tarmac. The Italian motorcycle manufacturer still contested offroad events, most notably the International Six Days Trial, or ISDT.

The ISDT was first held in 1913, in Carlisle, England. As it was originally devised, the trial was a test of both man and machine. Held on what would have been the mostly non-existent roads of the era, both rider skill and mechanical reliability played a key role in any success.

With the exception of interruptions thanks to both world wars, the ISDT ran every year after, and always in European countries. In 1973, however, the ISDT traveled to the U.S., where it was held at Ayrhill Dairy Farm in western Massachusetts. This is now the Hoellerich Farm and the location of a private enduro racing museum.

Since then, the event has been held in locations around the globe. To update the sport's image, in 1981 the FIM changed the title to the International Six Days Enduro, or the ISDE.

Rules and regulations changed over the years, but the ISDT, and later the ISDE, remained at its core an event that sees riders complete a course of upwards of 1,250 miles in six days. Competitors must meet critical time rules, and riders are the sole custodi-



ans of their machines. At the end of each day's competition, the motorcycles are impounded, and riders are only allowed a few moments each morning to fettle a machine. Mechanical replacement parts are extremely limited, so a competing motorcycle must be stout and sturdy in order to finish.

In 1959, at the ISDT held in Czechoslovakia, two members of the Italian Trophy team rode machines based on Moto Guzzi's 235cc Lodola, an overhead valve single-cylinder. The ISDT Lodola's weren't much changed from their road-going counterparts, and they proved to be quite competitive.

Changing the lineup

The late 1950s were financially difficult times for Moto Guzzi, yet it soldiered on producing a number of motorcycles ranging from small-capacity 2-stroke models like the 98cc Zigolo to larger 4-stroke models like the 500cc Falcone.

To simplify its small-capacity offerings, in 1960 Moto Guzzi introduced the updated 110cc Zigolo and the all new commuter-friendly 125cc Stornello Turismo, or Touring. Built to a price, everything about the Stornello represented cost-savings for Moto Guzzi. The wet sump 123cc overhead valve single-cylinder engine didn't require an external oil tank, eliminating the cost of the tank and oil lines, and the crankcase was pressure die cast, simplifying manufacture. The frame, with its dual front downtubes and swinging arm rear sus-

pension, was adapted for production so that a single machine performed all of the welds during its construction.

By 1961, Moto Guzzi offered the Stornello in Turismo and Sport models, and continued to offer some of its 4-stroke machines for offroad work. These models were dubbed the Lodola Regularita 175, Lodola Regularita 250 and the Stornello Regularita 125; *regularita* is Italian for regularity, or trials.

According to Moto Guzzi enthusiast Lee Potratz of Belleville, Wisconsin, in 1963 Moto Guzzi entered the ISDT competition in Czechoslovakia with 10 motorcycles: three 250cc Lodolas, two 175cc Lodolas and five specially prepared 125cc Stornellos.

"Every rider won gold," Lee says. "It was a banner year for Moto Guzzi at the ISDT, and it was also the last year the factory officially entered competition. Although the Moto Guzzi factory did not sponsor a team after 1963, their motorcycles were used privately through the early 1970s."

The five Stornello Regularita 125s used in the 1963 ISDT were factory-prepared, but they weren't far from the specifications of the original machines. In its basic form, the 123cc Stornello models — including a factory scrambler — continued in production through to 1975, with a 160cc Stornello offered beginning in 1969. In 1970, the Stornello 160 gained an extra gear with a 5-speed transmission.



1966 MOTO GUZZI 125 ISD TRIAL

Engine: 123cc air-cooled OHV single, 52mm x 58mm bore and stroke, 11.4:1 compression ratio, 13.5hp (claimed)
Top speed: 65mph
Carburetion: Single Dell'Orto UB 22 B52
Transmission: 4-speed, chain final drive
Electrics: 6v, coil and breaker points ignition
Frame/wheelbase: Dual downtube w/engine as stressed member/49.2in (1,250mm)
Suspension: Telescopic forks front, dual shock absorbers rear
Brakes: SLS drum front and rear
Tires: 2.5 x 19in front, 3 x 19in rear
Weight (dry/approx.): 208lb (95kg)
Seat height: 31in (787mm)
Fuel capacity: 2.46gal (10 liters)

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The Moto Guzzi 125 ISD Trial

And that brings us to this rare starling — the 1966 Moto Guzzi 125 ISD Trial. Lee says the machine was built for a single year only, but due to the licensing and titling process, some of the bikes are registered as 1967 or even 1968 models.

"The ISD Trial model is a replica of the bike Moto Guzzi entered in the 1963 ISDT," Lee says. "It was a replica made by the factory for civilian purchase, and only 75 made their way to the U.S."

According to a January 1966 announcement in the magazine *American Motorcycling*, 1966 marked the return of Moto Guzzi to the U.S. market. Premier Motor Corporation, a division of the Berliner group, was the sole distributor of the Moto Guzzi brand in the United States and Canada. The first machines to come over were the 123cc Stornellos, including the Sport and Scrambler. "In addition to these two models, a limited production of the I.S.D.T. Moto Guzzi, winner of 32 Gold Medals in four years running, will be offered. Prices are: 125cc Sport, \$429, 125cc Scrambler, \$469, 125cc I.S.D.T. Replica, \$589. Prices are the same, East Coast or West Coast," reads the *American Motorcycling* blurb.



The ISD Trial model uses a 22mm Dell'Orto UB 22 BS2 carb instead of the smaller 20mm carb used on the Stornello Sport and Scrambler models.

Why Moto Guzzi waited some three years after the 1963 ISDT successes to offer an ISDT replica is open to speculation. It might have been at the insistence of the Berliners — the Stornello Regularita was a formidable competitor, and it might

have been thought the model could be a strong seller.

Specifications were the same across the Stornello range for 1966. The 123cc engine had a bore of 52mm and stroke of 58mm. The electrical system was 6-volt negative ground. Differences that set the limited-production ISD Trial apart from its Scrambler stablemate include a hard-chromed liner in the light alloy cylinder, which is inclined forward at 23 degrees. The engine in the replica was tuned for more power and runs an 11.4:1 compression ratio versus the standard Stornello's 9.6:1 compression, bumping horsepower up to 13.5 from 7.

External differences include permanently affixed tommy bar extensions on both the front and rear axles. These would allow a competition rider to more easily remove a wheel for mending a flat, for example, without the need for extra tools. As well, a small chain is attached from the swingarm to the hub spacer on the left side of the rear wheel — it's the kind of piece that could be easily lost in the dirt. The steel spokes have a larger diameter than standard and the seat is a shorter solo-style piece. A 20mm Dell'Orto carburetor was standard on the Sport and Scrambler, while a larger 22mm Dell'Orto UB 22 BS2 was used on the ISD Trial model.

Lee Potratz's ISD Trial

A retired tool and die maker, Lee has been riding since his early 20s. His first machine was a 1974 Honda XL350, and he enjoys enduro-style motorcycles. He currently has some 15 two-wheelers, and while he says he never set out to be a collector, he's somehow accumulated machines as diverse as BSA Victors, a Yamaha SRX250, a 1989 Honda GB500 and a 2007 Ducati GT1000.

Lee also owns this original 1966 Stornello ISD Trial. The little Moto Guzzi first belonged to Darrell Johnson of Johnson's Cycle Repair and Accessories in Webster City, Iowa. Darrell campaigned the Moto Guzzi in 1968 at the Iowa State Enduro Championship, where he placed second.

The bike remained in Darrell's collection until the late 1990s, when a friend of Lee's picked it up at an Antique Motorcycle Club of America swap meet. "Darrell had retired, and was going out of business," Lee says. "A number of



This ISD Trial still wears its original Continental "Gelande Sport" trials-type tires.

his bikes and parts were offered for sale, and I was with my friend when he bought it."

When Lee's friend passed away some years later he willed the ISD Trial to Lee, and Lee acquired the machine in 2005. Lee's ISD Trial is something of a time capsule, as very little has been touched on it. In fact, even the Continental "Gelande Sport" trials-type tires on the 19-inch steel rims front and rear are original. "Without a speedometer it's impossible to verify just how far it's gone," Lee explains, "But there's very little wear on anything. There's one small tear in the seat, but that just gives the bike some patina."

The only non-original parts on Lee's ISD Trial are the handlebars and the grips. From the factory, the machine was fitted with a dull-chrome handlebar and red grips, but these were changed long ago at Johnson's shop. Lee's always looking for the correct pieces online and in person at swap meets, but he's not holding out much hope. "It's going to be impossible to find those," he says.

Right now, the ISD Trial runs, and Lee enjoys showing it off at AMCA meets and other gatherings such as



Owner Lee Potratz enjoys showing his ISD Trial at a variety of AMCA and Moto Guzzi gatherings.

the annual Wisconsin Moto Guzzi Riders Rally. "Even among Moto Guzzi people, this is not a well-known machine," Lee explains. "They know about the Roadster and the Scrambler models, but they're not well acquainted with some of the subtle differences that make the ISD Trial its own unique model." Of his ISD Trial, Lee says it's a simple one or two kicks starting it from either cold or hot, and the Dell'Orto carburetor never requires flooding. The sound emitted from the high-level exhaust and muffler is, he says, "a nice crisp putt-putt-putt."

"This is one of the nicest survivor motorcycles I've ever seen," Lee adds. "I've only had to replace

the rotten fuel tank mounting rubbers, and I've acquired new clutch plates." Future repair projects include replacing the clutch plates as it will lock up in low gear, and the fork seals need to be changed. After attending to those chores, Lee says he'll continue to "keep it, take care of it and maintain it." It might not resonate with others like Shakespeare's plays and poetry, but of the rare starling ISD Trial model, Lee says, "I consider myself fortunate to have it in my collection." **MC**



BACK TO THE FUTURE?

2015 Ducati Scrambler

Story by Alan Cathcart
Photos by Milagro

The usually yellow-painted Ducati Scramblers in 250/350/450cc guise were the last 4-stroke singles with lights and a number plate to leave the Italian manufacturer's Bologna factory, killed off in 1975 after 40,000 had been built, thanks to a misplaced faith that the 125cc 2-stroke that replaced them would generate greater profits.

Now, after twice thinking better of doing so before, Ducati has finally launched the Scrambler that debuted at Intermot 2014 in Cologne, Germany, last October, with deliveries due to start by the time you're reading this. But after riding it at a gloriously over-the-top press launch in the *über-retro* city of Palm Springs, California, I have to say the only thing the new model has in common with the old is the name on the tank — and even that's been reversed, as in SCRAMBLER Ducati. Scrambler brand director and leader of the model's six-person development team Mario Alvisi says this is because this isn't just a new bike, it's a new brand, much like MINI is a spin-off lower-cost adjunct of BMW.

Lifestyle statements

All this is an exercise in Marketing 101, generating what the corporate suits hope will be a feel-good factor that will inspire free spirit customers to buy a Scrambler. They'll be aided by a vast array of more than 120 different Scrambler apparel items and other aftermarket add-ons that Ducati is launching alongside the bike, said accessories having been re-baptized as "ingredients." Ducati would have you believe that with the new Scrambler, "It's not about the destination, it's about the journey." Too bad the marketers didn't do their homework properly, though, for according to Ducati "the bike is named after the English word to scramble, meaning mixing up or blending." When then U.S. importer Joe Berliner coined the model name in 1962, he certainly intended it to be

a reference to the then best-selling British scramblers — as in dirt bikes, this being what motocross was termed as Back Then. Oh, well.

It's very evident that what's on offer here is lifestyle with a capital L, with the motorcycle itself the vehicle to deliver that any way you want it, aided by a low entry price of \$8,495 for the Icon base model in red — the yellow version is \$100 more. The new Scrambler is Ducati's conscious attempt to carve itself a slice of the same flourishing retro-inspired pie that the born-again Bonneville — now responsible for well over 50 percent of Triumph's total unit sales — has carved out since its 2000 debut (aided since 2006 by Triumph's own Scrambler) — plus a share of Harley-Davidson's lifestyle market.

In promotional terms the Scrambler is in many ways an American bike that just happens to be made in Italy. Call it Ducati's Sportster, for in true Harley-Davidson spirit the differences between the four versions of the Scrambler launched so far are 100 percent aesthetic — the mechanical platform is identical.

The Icon is the base model, and comes in yellow (\$8,595) or red (\$8,495), with a steel handlebar, plain black seat and 10-spoke cast aluminum wheels. The Classic (\$9,995), available only in Orange Sunshine, has aluminum fenders (the rest have individually styled plastic ones), wire wheels and a stitched brown seat, while the Urban Enduro (\$9,995) comes in Wild Green and has a good-looking horizontally ribbed brown seat, a sump guard, fork protectors, a headlight grill, a cross-brace on







the steel handlebar, and wire wheels. The Full Throttle (\$9,995) is the “sports” version, a sort-of street tracker that comes in all-black with yellow pseudo number plates designed into the seat’s side panels, Termignoni dual-outlet exhaust, cast wheels and a flatter, tapered aluminum handlebar. Each version is re-branded via its own unique Scrambler Ducati tank badge: You have to credit Ducati for making sure it gets as large a slice for itself as it possibly can of the custom aftermarket for this model.

Scrambler details

All four versions share certain key design features, embodying a blend of retro mixed with modern. These include the teardrop-shaped 3.6-gallon gas tank, whose aesthetics can be personalized or even changed according to your mood by bolting on a different pair of side covers — there are dozens to choose from. There’s a USB port under the seat, and the classic round headlight is cleverly rimmed with an LED ring that can act as a running light in countries where the headlamp needn’t be permanently lit.

The single fork-mounted round instrument offset to the right is a tribute to the original Scrambler. It comes with a full digital display prominently showing your speed, with the tachometer running around the bottom of the rim

and the time at the top. Yet there’s no gear selection indicator, a mistake on a bike that will be ridden by newbies. There’s no fuel gauge either, just a warning light, allegedly on grounds of cost. The “Born Free 1962” inscription on the fuel cap is Ducati’s way of further reminding you where the bike came from.

The modern-looking non-adjustable 41mm Kayaba upside-down fork is set at a sporty 24-degree rake, matched to a quite rangy 4.4 inches of trail to deliver light yet ultra-stable steering. The very retro and these days pretty rare 18-inch front wheel (matched to a 17-inch rear) carries a single oversize 13-inch front disc sourced from the Panigale Superbike, gripped by a radially-mounted 4-piston Brembo caliper. Switchable dual-channel Bosch 9.1 ABS is standard, with an integral pressure sensor that kicks in very effectively, if a little brusquely, as I found out riding the Scrambler in the rain — yes, in Palm Springs, in winter.

The rear cantilever monoshock inboard of your left foot is also by Kayaba and is adjustable only for preload, while the chunky-looking Pirelli MT60RS tires are claimed to be “produced exclusively for the Ducati Scrambler.” These are effectively Pirelli’s Diablo Rain wet-weather road racing tires from 10 years ago, revamped for street use but with the same distinctive



2015 DUCATI SCRAMBLER

Engine: 803cc air/oil-cooled OHC desodromic 90-degree V-twin, 88mm x 66mm bore and stroke, 11:1 compression ratio, 75hp @ 8,250rpm
Top speed: 130mph (est.)
Fuelling: Single 50mm throttle body injection
Transmission: 6-speed, chain final drive
Electrics: 12v, electronic ignition
Frame/wheelbase: Tubular steel trellis frame w/ engine as stressed member/56.9in (1,445mm)
Suspension: Inverted Kayaba 41mm fork front, single Kayaba preload adjustable shock rear
Brakes: Single 13in (330mm) disc front, single 9.6in (245mm) disc rear
Tires: 110/80 x 18in front, 180/55 x 17in rear
Weight (wet): 410lb (186kg)
Seat height: 31.1 in (790mm)
Fuel capacity/MPG: 3.6 gal (13.6ltr)/50mpg (est.)
Price: Starts at \$8,495

The 2-into-1 exhaust emits a quiet burble. Although the engine was derived from the Monster 796, it's been redeveloped to give smooth acceleration throughout the rev range.



(and certainly retro-looking) tread pattern. Said tires allowed yours truly to set four FIM World records on the Bonneville Salt Flats aboard the South Bay Triumphs, delivering grip on slushy salt where wheel spin prevailed with anything else. *Scrambleristi* can have confidence riding their bike in the rain (or snow!) and the tread pattern gives sufficient grip to help the Scrambler sort of live up to its name. A short off-pavement excursion into the Mojave Desert showed it does do dirt — provided you don't get too carried away. And remember that with those wheel sizes offroad ground clearance isn't the greatest.

This quartet of new models represents an interpretation of what the Scrambler might have become today had production never been interrupted, says Alvisi. They are the last remaining air/oil-cooled desmodue (2-valve) models in the Ducati catalog; the remaining Monster variants powered by such engines have

been discontinued. The 88mm x 66mm bore and stroke 803cc 90-degree V-twin engine is essentially derived from the Monster 796, but it's been redeveloped to give smooth acceleration throughout the rev range, says project leader Antonio Zandi, with new camshafts designed to ensure a linear power delivery thanks to the adoption of an 11-degree angle on the valve overlap. The Euro-3 compliant 2-into-1 exhaust with aluminum muffler has been specially designed for the Scrambler, with an aluminum heat plate for rider protection.

The Scrambler has a single 50mm throttle body for more fluid power delivery (the Monster engine used two) and also to make space for the teardrop fuel tank, says Zandi, but with separate injectors for each cylinder. Indeed, the entire intake package is contained within the airbox, which is itself wrapped within the specially-designed tubular steel trellis frame. The Scrambler is





The new bike draws inspiration from earlier Scramblers, like this 1970 450 Scrambler. The fuel cap reads "Born Free 1962."

very well laid out, resulting in an exceptionally slim motorcycle that feels pretty small and nimble-handling to ride.

The 6-speed gearbox retains the Monster's multiplate oil-bath Adler APTC slipper clutch, which prevents rear wheel chatter when downshifting. It's also cable-operated, emphasizing the minimalist nature of the Ducati Scrambler, says Zandi. Back to the future. The Scrambler engine has lost 12 horsepower in the transition from the Monster, delivering a claimed 75 horsepower at 8,250rpm, with a comparable drop in torque. But in the end, after all the hype of the marketing departments, what really matters is if the bike's any good. Fortunately, as an abbreviated 70-mile Californian ride showed us, it really is.

On the road

The new Scrambler is accessible, accommodating, comfortable and easy to ride. It's a simpler and less intimidating bike than anything else in the Ducati range, a true all-rounder whose 31.1-inch seat height will let most people put their feet flat on the ground at traffic lights. An optional lower seat is also available, if needed.

The Icon's upright riding position is absolutely ideal, with the wide handlebar's grips literally, in best tester cliché, falling to hand, resulting in a relaxed stance. Both the brake and clutch levers are adjustable. The seat is well padded enough

to be comfortable on any journey a Scrambler is likely to make in length, and the footrests are sufficiently low to be relaxing, without touching down at relatively enthusiastic angles of lean. The fuel tank is well shaped, so you grasp it cozily with your knees, and the mirrors give a good view and don't vibrate. This bike was obviously developed and refined by people who rode it — a lot. The clutch is light and precise (no cramping

up your left hand riding round town like on the old Ducati dry clutches) and the gearbox shift action is flawless: It's fully up to Japanese quality.

The single throttle body delivers a super-light throttle, and it's probably not responsible for the only real dynamic criticism I have of the Scrambler, which is its jerky response from rest when leaving a standstill in first gear and brusque pickup from a closed throttle exiting a turn in second. This is almost certainly a fuel mapping issue, and it should be addressed, because Ducati is rightly positioning this as its entry level model. There will be lots of riders, newbies in particular, who will be put off by this abrupt throttle response.

Otherwise, the friendly character of the V-twin desmo engine is very pleasing. Acceleration is relaxed and performance no more than adequate, with no need whatsoever



Simpler and less intimidating than anything else in the Ducati range, the Scrambler is a true all-rounder.

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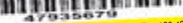
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The Classic model is available only in Orange Sunshine, and wears aluminum fenders (left). The Urban Enduro is painted Wild Green and has a cross-braced handlebar (below left). The Full Throttle is the “sports” version, and comes with the Termignoni dual-outlet exhaust (bottom).



to rev it out to the 8,000rpm mark, when the red shifter light on the dash starts flashing to tell you to change gear. It's quite punchy, but not excessively so — just nice to ride. The 3,000-6,000rpm rev band is its favored operating zone, and you can hold fifth gear for miles on end along a winding road, just riding the broad waves of torque. In sixth gear, 6,000rpm equals 80mph, and that's the Scrambler's comfortable cruising speed, with no undue vibration.

It's smooth but invigorating, as well as very quiet mechanically. There's a nice little burble from the 2-into-1 exhaust exiting behind your right foot, just loud enough to make you smile, although the exhaust headers on all the test bikes discolored after less than 400 miles.

Although it shares the same desmodue engine, the Scrambler is much more than a revamped Monster. While equally naked and unashamed, it's a quite different concept, more relaxed and chilled-out. You sit farther back, and it feels very light and easy-handling, with the Pirelli tires giving great grip in all conditions — and we went through at least three seasons in one day riding in the mountains above Palm Springs. The wide handlebar lets you chuck it around easily, yet it's well-balanced enough to be confidence inspiring for less experienced riders at slower speeds. It's very neutral steering, yet responsive without being nervous.

Ride quality was excellent from the Kayaba rear shock in spite of no linkage (though I expect the variable rate spring is a factor in this) and with almost 6 inches of wheel travel at both ends it handles bumps well and also dips in the road taken at speed, where I never felt it bottom out. The non-adjustable fork isn't quite as effective. While softly-sprung it seemed a little “dry” at times and not as compliant, but not to the point of chattering in turns, and on damp roads it gave enough feedback to make you feel safe. It's probably built to a price, but the rear shock was better than I expected at the Scrambler's price level.

The big front disc stops the bike well, with a soft initial bite before coming on strong — exactly what you need for beginners and experts alike. With the rear brake not overly strong but sufficient, this is an excellent brake package, well able to stop the Scrambler's 410-pound fully-fueled weight.

Ducati is a company that has always stood — and occasionally fallen — on the dynamic excellence of its products. It's therefore quite a surprise to find its current management so intent on marketing overkill in promoting the new SCRAMBLER Ducati model, almost as if they weren't really too sure it was any good and needed help in making an impression in the marketplace, fueled by a vast promotional budget.

Yet what really matters is that Ducati has indeed achieved what it set out to accomplish, creating an unintimidating, well-priced, post-Monster entry-level bike that's both functional and fun, as well as being cool.

It'll sell like hotcakes, but only because it's an excellent motorcycle that focuses successfully on the basics of biking, not because of (or in spite of?) all the questionable promo hype. I often quite like the destination just as much as the journey, even on a fun bike like this, which makes it enjoyable getting there! **MC**



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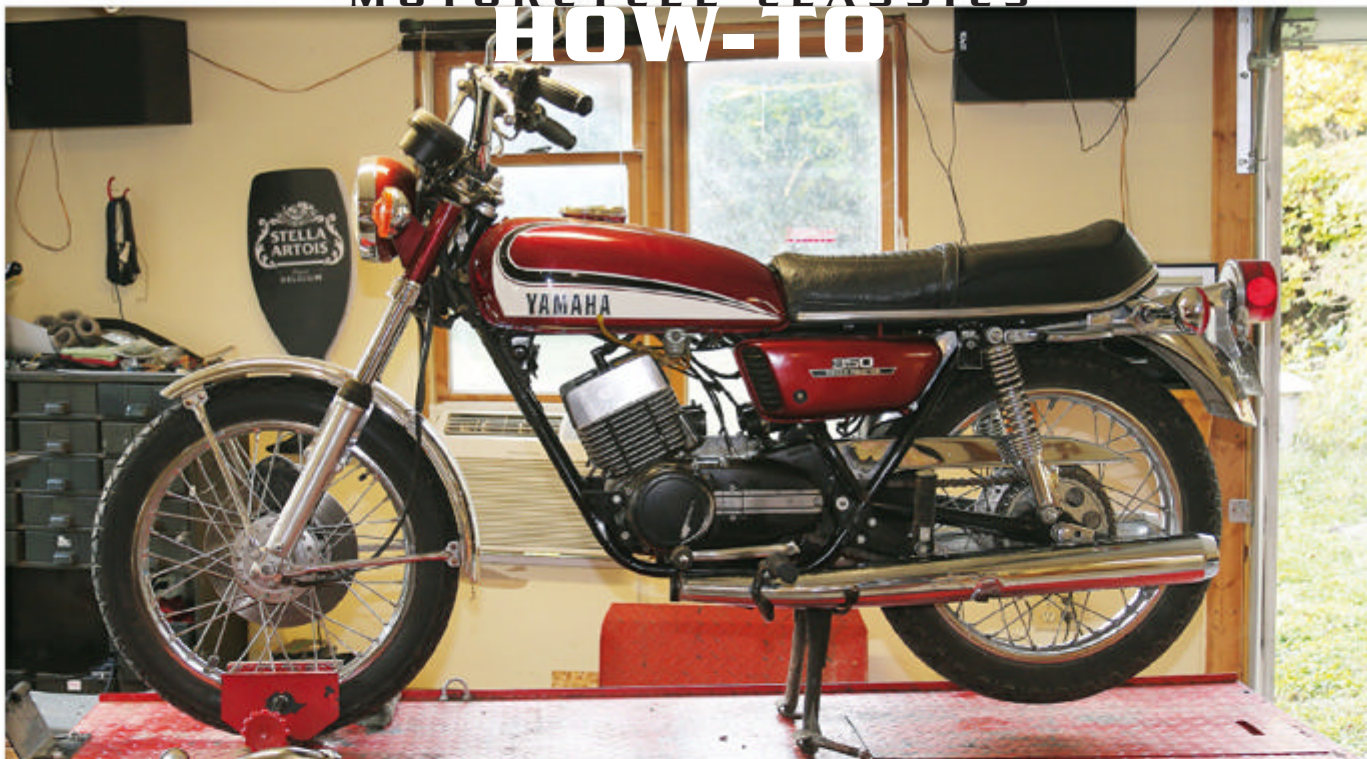
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Pressure check a 2-stroke engine

Owners familiar with 4-stroke motorcycle engines often find themselves at a loss diagnosing poorly running 2-stroke engines. A 2-stroke engine is simpler (no camshaft, valves or valve gear), so by extension that should make it easier to work out issues with poor performance. The frustration comes when you can't get your oil burner to run right even after confirming adequate compression, proper carburetion and correct ignition timing.

Recently, we hit a wall trying to get a 1973 Yamaha RD350 2-stroke running properly, so we turned to Brad Obidowski of HVCycle (hvcycle.net) in Lincoln, Nebraska, for help. A 2-stroke fan and RD350/400 fanatic in particular, Brad has acquired a great deal of knowledge about Japanese 2-strokes. After we described our RD's running problems to him, Brad offered to spend a few hours showing us the steps he goes through diagnosing 2-stroke performance issues.

Beyond checking compression, carburetion and ignition, Brad says the single most important test to run on a 2-stroke is a leak-down test. A 2-stroke engine requires a properly sealed block to run right because it uses the crankcase vacuum created from the rising piston to pull the incoming charge into the crankcase; the downward stroke of the piston pressurizes the charge, pushing it into the intake ports and up to the combustion chamber. If there's significant leakage anywhere in the block, the fuel/air charge won't be adequately drawn or pressurized to transfer to the combustion chamber.

The engine will also run lean from drawing in extra air, which can lead to piston seizure. Leakage points include the cylinder head, cylinder base, intake manifolds, and crankshaft seals. Repairing cylinder head and intake leaks is generally fairly simple, while replacing crank seals typically requires a full teardown.

The test involves pressurizing your 2-stroke engine block to see how long it holds pressure: If it loses any pressure over 2 minutes, you have a problem. Although there's a bit of prep time involved (carburetors and exhaust manifolds have to come off for the test), it's actually a surprisingly straight-forward process, and in our case it returned immediate results that explained why we couldn't get our RD350 to run properly.

When testing, Brad suggests 7psi for pressurizing. Never exceed 10psi or you'll risk blowing seals. For testing, Brad has a comprehensive kit with different sized aluminum intake and exhaust port plugs, but you can make up the parts you need fairly easily. Expanding rubber freeze plugs available at any auto parts store are perfect for sealing the exhaust ports, and you can make intake plugs from PVC with an air fitting adapted to one of them for pressurizing the engine. Alternatively, the intake can be sealed with a rubber gasket sandwiched between the intake manifold and the engine, with an air fitting fitted at the spark plug to pressurize the engine; just make sure the pistons aren't completely covering the ports.

As always, have a good shop manual on hand for proper torque specs.



A full assortment of test fittings is nice, but you can make your own from readily available bits. Go to MotorcycleClassics.com/2-stroke-test for more.



"The test involves pressurizing your 2-stroke engine block to see how long it holds pressure. If it loses any pressure over 2 minutes, you have a problem."



1 To begin, remove the carburetors (and the gas tank, if necessary) and the exhaust system. We only had to remove the exhaust headers on our RD350.



2 Next, plug the exhaust ports. For Yamaha RDs Brad uses a thick rubber gasket under a flange to seal the port. You can sometimes use the existing gasket, but an expanding rubber freeze plug works just as well.



3 Exhaust ports sealed (with the right side port barely visible behind the frame downtube). Slide the rubber gaskets over the exhaust mounting studs followed by the flanges, then tighten securely using the stock flange nuts.



4 Next, plug the intake side. We used aluminum plugs from Brad's kit, making the job easy. The plug in the left intake is threaded and has an adapter for an air fitting for pressurizing the crankcase.



5 To pressurize the crankcase we used Brad's handheld pressurizer. It's nothing more than a squeeze bulb attached to a pressure gauge. Simply pump the bulb until 7psi shows on the gauge, then wait for 2 minutes to see if the engine loses any pressure.



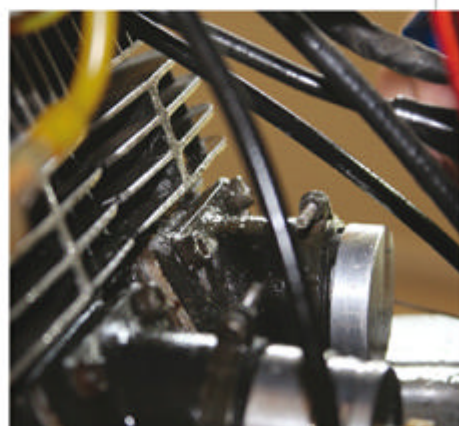
6 In our case it was immediately apparent we had a problem. The pressure in the engine dropped almost instantly from 7psi to 5psi before continuing its downward spiral.



7 To find the source of the leak you need to supply a steady flow of air to the engine. To do this, we first attached a pressure regulator to an air hose off our compressor. Before you start, make sure you have the regulator dialed all the way down to zero to avoid over-pressurizing the engine. Slowly bring the pressure up to 7psi.



8 Following Brad's advice, the first place we checked for leaks was at the intake manifolds, the cylinder heads and the cylinder base. We sprayed those areas liberally with water, mixed with a little bit of liquid dish detergent.



9 Spraying down the intake manifolds returned immediate results, with soapy bubbles showing that our RD350 was leaking around the right intake manifold where it seals to the cylinder.

MOTORCYCLE CLASSICS

HOW-TO



10 Working our way around the engine with the spray bottle, we found a second leak, this time at the rear of the right hand cylinder head. We continued checking, but fortunately found no more apparent leaks.



11 Next, we removed the intake manifolds. Yamaha RD350s have a reed valve sandwiched between the manifold and the cylinder. Ours had been removed at some time and reinstalled with silicone but no gasket. It had probably been leaking for years.



12 Use a scuff pad and a scraper to remove all traces of old sealant and gasket from the cylinder. Be careful using scrapers as it's easy to gouge the soft aluminum. In this photo the left intake sealing surface has been mostly cleaned while the right is as found.



13 Clean both sides of the reed valve plate, and the sealing surface of the intake manifold. Smear a thin layer of fuel-resistant sealant on new gaskets for the manifold and reed valve. We also opted for new intake manifolds, readily available from HVCycle. Gaskets were \$6.95 each and new manifolds \$50 each.



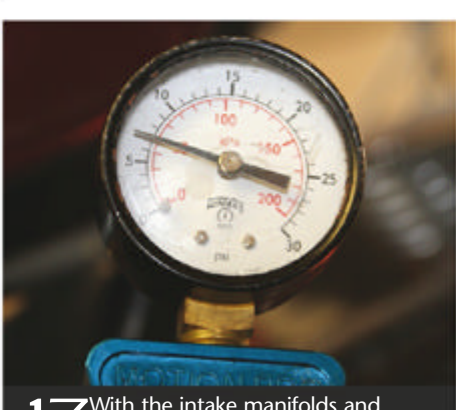
14 Next, we removed the right cylinder head. It's held by four bolts easily located around the spark plug. Removing the head showed tiny marks on the combustion surface, suggesting something had been in the combustion chamber striking it.



15 Although hard to see, the front edge of the piston has been losing material — probably burning up from running lean — explaining the marks on the inside of the head. This engine will need more work, but we installed a new head gasket so we could check if we'd found all our leaks.



16 Reinstall the cylinder head, making sure it's centered as there's some play around the cylinder studs. Next, torque the cylinder head down to proper specs, working in a cross pattern. Our manual shows 18ft/lb.



17 With the intake manifolds and cylinder head back on, we ran another pressure test. This time our RD held 7psi without wavering, showing we'd found the source of our leaks. If it wasn't for the piston damage we found, we'd send the RD out on the road.



18 As a final piece of the process, we checked our RD's compression pressure. Both cylinder showed 100psi cold, which is perfectly adequate. Coming soon: Rebuilding a Yamaha RD350 engine! Stay tuned!

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“When it finally did start, there was a loud backfire through the mufflers.”

Norton luggage rack

Q: I'm trying to find a sissy bar and luggage rack for my 1975 Norton Roadster, to no avail. It could be either of the two or a combination sissy bar/rack. It doesn't need to carry much weight, either. The items I'd carry are an extra helmet and rain gear. Any suggestions?

Mitch Zyman/Merrick, New York

A: There are a couple of options, one of which we did an article on a couple of years ago. Here's the link to that one: MotorcycleClassics.com/ventura-norton. Also, check out Andover Norton's website accessories page at andover-norton.co.uk. Scroll down a bit and you'll find their luggage racks.

Cool runnings

Q: I have a problem when checking the cooling level in my coolant tank. I suppose when the bike was new the tank was more or less clear and any color of coolant could be readily seen. Over the years, the plastic has degraded to the point the coolant is nearly impossible to see. In order to check the coolant level, I have to get down on all fours to view the tank and shake the bike so the coolant can be seen moving. At 70 years of age, this is hard to do. I could simply install a new tank if one is available, but is there anti-freeze out there that is not yellow in color? Any suggestions?

George W. Miller, Jr./via email

A: I have this same problem with a number of plastic containers, from coolant tanks to batteries, and there is no easy fix that I can see. What I do that helps me to see the level is find a way to shine a strong light from behind or beneath the container and let that illuminate the fluid level enough to see. If there is no way to get a flashlight behind the tank, maybe one of those thin, flexible lights can be snaked up behind the tank. Good luck!

Hard starter

Q: Why is my 2002 Triumph Bonneville so hard to start? If it has not been started for a few weeks, it is a gorilla to start. The carbs have been re-jetted to a 130 main, a 42 pilot jet,



Ready to take your classic queries: Old bike mechanic Keith Fellenstein.

with the needles using two shims. I have replaced the spark plugs and charged the battery. What is the problem?

Rick Romanesque/via email

A: Your 2002 is different from the old Triumphs I'm used to working on, but since I recently had one the same age through my shop for a similar issue, I'll take a shot at it. The one I worked on had sat for three years without being run, so the carbs were completely gummed up. But worst of all, and not found the first time, the petcock filters inside the tank had totally disintegrated, allowing all kinds of junk to come back in and clog the just-cleaned carburetors. Once the petcock was replaced and the carburetors cleaned (again), the bike started and ran as it was supposed to. So check your fuel flow through the petcock and the quality of the fuel flowing through the petcock, then make sure that all the carburetor passages are clean, including the fuel enricher/choke.

BSA diagnosis

Q: I recently purchased a 1968 BSA Firebird Scrambler. It took many tries to finally get it started. When it finally did start, there was a loud backfire through the mufflers. The next kick got it started for good, but it wouldn't idle down very far. Thinking it was probably stale gasoline, I rode it for a few blocks to check out the clutch, brakes and transmission. All seemed fine, except for a tendency to die when

the throttle was released. Long story short, it died right after I returned.

The next day, I tried starting it again. It wouldn't fire. Thinking it was the battery, which was very weak, I installed a new battery with a full charge. Still, there was no spark at either plug when cranking it with the ignition switch on. I removed the points cover to see if there was anything obvious that would cause this. Much to my surprise, it had an electronic ignition. I don't know the brand, but I'm guessing it's a Boyer. Now I'm really stumped. I know it must have been properly installed as the engine did start and run. Where would you suggest I start in diagnosing the problem? For what it's worth, the white wire to the Zener diode is disconnected. The diode is

mounted to the frame under the fuel tank, but the wiring schematic shows the white wire is not used on the 1968 Firebird Scrambler model. The polarity is correct, with a positive ground, unlike many that have been wired incorrectly. Any help you might be able to give will be greatly appreciated. There aren't any BSA mechanics in my area!


John Botts/Ponca City, Oklahoma

A: You can easily test for spark with a Boyer. First, pull a spark plug and lay it on the cylinder head to ground it. Next, disconnect the trigger wires from the unit under the points plate. With the ignition on, touch the ends together. Every time you touch the trigger wires together you should get a spark. As for the wire to the Zener being disconnected, look around under the tank or seat to see if someone installed a different regulator/rectifier like a Podtronics. If you have one of those installed you disconnect the Zener diode, as the Podtronics device does the work of both the rectifier and the voltage regulator. I'd also check to make sure the rotor under the pickup plate is tight on the camshaft end. If it is loose your timing becomes erratic at best and your bike becomes unstartable at worst. **MC**

Got a question about your old bike? Email them to keithsgarage@motorcycleclassics.com or write to: Keith's Garage, Motorcycle Classics, 1503 SW 42nd St., Topeka, KS 66609


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Circle #7; see card pg 65

Going 10/10ths: AHRMA racer Cindy Hill

Getting to know Cindy Hill, one thing becomes immediately apparent: When she puts her mind to something, she's all in. "I always like to go 10/10ths," Cindy admits, "which is not always a good thing."

Cindy's introduction to vintage motorcycle racing came somewhat circuitously, starting with Porsches when she belonged to the Porsche Club of America. "My ex-husband had a 944. He wanted me to go out on the track. I didn't have any interest in racing, but basically said, 'if you'll leave me alone, I'll go.' I did one session and walked out with this huge grin on my face." It must have been a really big grin, because two years later, Cindy was instructing other drivers.

Motorcycles came in 2004, when she took the Motorcycle Safety Foundation's Beginner Rider Course. She almost failed. "I'm thinking, s***, I'm supposed to be this hot dog racer chick, and I barely passed," Cindy recalls, the memory still tinged with exasperation. Characteristically, Cindy got up to speed quickly: By the end of her third year riding, she was an MSF rider coach.

The shift to racing came after meeting Alex McLean, well known in AHRMA circles for his winning ways aboard the Norton Manxes of Norton Champagne Racing Team, aided by legendary tuner and former wrench to the stars Nobby Clark.



Rider: Cindy Hill
Age/years racing: 60/1
Occupation: Internet marketing/design
Race bikes: 1975 Honda CB400F, 2005 Honda RS125
Daily rider: 1988 Honda NX125, 1989 Honda TransAlp

That was in 2007. Fast-forward to 2013 and the Bonneville Vintage GP at Miller Motorsports Park in Utah, where Alex suggested Cindy "might want to think about racing," Cindy recalls. "My first race was at Roebing, February 2014. That's my favorite track, and I rode the RS [Honda], and it's a handful; I was lucky not to miss a shift. I finished third out of three."

Not surprisingly, she didn't stay in back for long. A first place win came at Miller in September, riding the Honda CB400F she'd first raced in June at Road America. She thought she had come in second: "The only reason I got first was because the lead guy broke down. I was so pleased I got second, but then John Miller, who'd been first, came out and said 'no, you won, I broke down.'"

A "real" first place win was waiting in the wings, however, and it would be a big one. Coming around the last turn at Daytona raceway in the last AHRMA race of the year, Cindy got

the jump on Mike Kirby, who had beat her at Barber a week before, to take home the win. "When I went across the finish line, well, you can imagine what my first word was, followed by 'I just won!! I just won!!' — all the way back to the garages. Nobby thinks it must be some sort of record; I'm a woman, a novice, it's my first time at Daytona, and I win," Cindy says.

"The thing that stands out the most is the evolution from my first racing experience to my last," Cindy says. "At Roebing, I just couldn't wait for it to be over. Then at Road America, I'm suddenly on a bike I can have confidence in and I can feel my skills dovetail with the bike's."

It was a memorable year, capped off in December when Cindy and Alex tied the knot, forming the new husband and wife racing team of Cindy and Alex McLean. 2015 should be an interesting year. **MC**



Cindy Hill heads for a second place finish in the Novice Historic Production Lightweight class at New Jersey Motorsports Park.

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Hidden in Arizona's majestic Mule Mountain range 90 miles southeast of Tucson and just a hop away from the Mexican border, Bisbee is as much a jewel as the gems that came out of her mines. Bisbee combines the Old West, the American Southwest, a 1960s counterculture feel, fine dining, superior scenery, great riding and more. With only 6,000 residents and covering just 5 square miles on steeply-sloped hills, the town almost looks European, but it's Wild West all the way.

Founded in 1880, the town grew up around the Copper Queen Mine. Mining drove the economy until the 1970s, with more than 8 billion pounds of copper and 3 million ounces of gold taken out of the Mule Mountains, along with a bunch of zinc, silver, turquoise and many other exotic minerals.

Bisbee is a town that will not die. She burnt to the ground in 1908 and rebuilt quickly. A second brush with death came when the copper played out: Bisbee seemed destined for hard times, but that wasn't meant to be. The town's rustic hillside attracted a thriving artist colony and the hippies took over. A ride through the town's tight streets (laid out when horses and walking were the only ways to get around) reveals Bisbee's relaxed lifestyle. Awesome art, vibrant colors, classic architecture and pristine VW buses abound. You'll spot at least a few motorcycles in front of every hotel in this motorcycle friendly town.

The riding in and around Bisbee is impressive. The fun begins once you exit I-10 and head for the hills along SR 80. State Route 80 includes long straights through the desert and tantalizing twisties as you climb into the Mule Mountains. Bisbee is nestled in the hills on your left, but don't stop yet. Pass Bisbee's

entrance and continue along SR 80's colorful cut through the Mule Mountains and you'll find the best photo op in town; the enormous Lavender Pit on your right. It's a monstrous hole (850 feet deep, 4,000 feet wide and more than a mile long) with an artist's palette of colors hinting at the ore it once held. It's best to return to this spot just after sunset to get the best photos.

Judge DeWitt Bisbee was one of the principal investors in the Copper Queen Mine, an operation that dug deep for the Mule Mountains' treasures. The Copper Queen Mine moniker is obvious; this area was one of the largest copper producing regions in the world. Open pit mining started in 1917 to meet wartime demands for copper. Work on the famous Lavender Pit commenced in 1954. The Lavender Pit's palette has little to do with its name, though. Even with more than 300 minerals giving the Lavender Pit its many colors (including some that add a lavender hue), this open pit mine is named after Harrison Lavender, a former general manager of the mining company, Phelps Dodge.

Bisbee contains no big name motor lodges; this is an artsy collection of bed and breakfast joints and vintage hotels, complete with saloons and a tangible Old West feel. We stayed at the Bisbee Grand Hotel on Main Street and enjoyed a fine breakfast at the adjoining Marysol's Grand Kitchen. Waking up to Marysol's strong black coffee and chilaquiles marked the start of a great day (she makes her own tortilla chips right there). Try the Café Roka's artichoke lasagna for dinner (they are only five doors down from the Bisbee Grand) and all will be well with the world. — Joe Berk

THE SKINNY

What: Bisbee, Arizona. The authentic Old West with real saloons, vibrant colors and great roads!

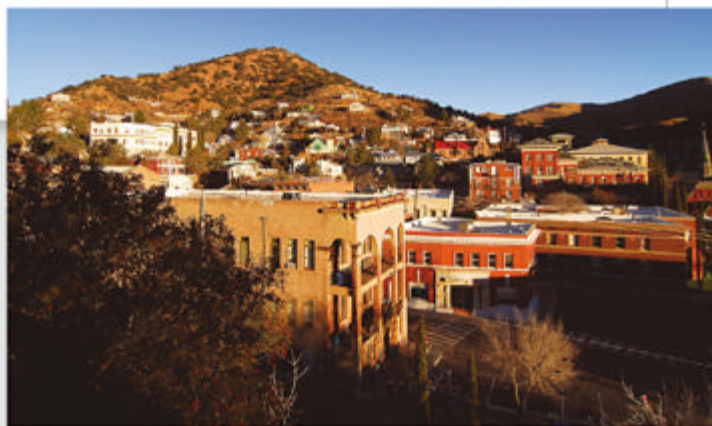
How to Get There: Take I-10 from either Tucson or El Paso, point your front wheel south on SR 80, and enjoy the next 50 miles as you climb into the Mule Mountains!

Best Kept Secret: Café Roka. Try the appetizer sampler and choose from their outstanding native Arizona wine list.

Avoid: Getting a hotel room right above the saloon!

More Info: discoverbisbee.com

More Photos: motofoto.cc



Bisbee is nestled in the Mule Mountains of Arizona.

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CALENDAR MARCH/APRIL

Don't miss these upcoming events!

3/7 Celebrating its fifth year, the Modern Classics Motorcycle Show is back and better than ever. New for 2015 is the Friday Night Modern Classics "Kick-Start" Party from 7-10 p.m. at the show's home, Martin Motorsports in Boyertown, Pennsylvania. This year's featured class is custom motorcycles from the 1960s-1980s. Normally a new bike dealership, Martin Motorsports is transformed once a year into a classic bike paradise of about a hundred motorcycles just for this show. On the web at martinmoto.com

3/6 One of the first big bike events of the year, Daytona Bike week returns this year, running Mar. 6-15. The racing kicks off on Saturday, Mar. 7, with the Daytona Supercross, Flat Track racing on the 12th and 13th on the Daytona Flat Track outside turns 1 and 2 of the super speedway. For more info, schedules and specific locations of activities visit the Bike Week site. On the web at officialbikeweek.com

3/28 Join the folks from the Clubman's All-British Show and Swap Meet, back for their 28th year. Held at the Santa Clara County Fairgrounds in San Jose, Calif. This year's feature is a salute to AJS and Matchless motorcycles, and this year's raffle bike is a sharp 1970 Triumph Daytona. The show is Saturday, Mar. 28, with the "Morning After Ride" on Sunday. On the web at bsaocnc.org



This 1955 Norvin Custom, presented by David Tompkins, received the People's Choice award at the 2014 Modern Classics Motorcycle Show.

Feb. 20-22 — AHRMA Road Racing at Roebbling Road. Bloomingdale, GA. ahrma.org

Mar. 6-7 — AMCA Sunshine Chapter National Meet. New Smyrna Beach, FL. sunshineamca.org

Mar. 6-8 — Vintage Motorcycle Alliance 4th Annual Intl. Vintage Motorcycle Swap Meet and Bike Show. Eustis, FL. vintagemotorcyclealliance.com

Mar. 7-8 — 25th Annual Super Show and Swap Meet. Colorado Springs, CO. pro-promotions.com

Mar. 8 — Walneck's Swap Meet and Show. Princeton, IL. walneckswap.com

Mar. 13-15 — 12th Annual Inland Northwest Motorcycle Show. Spokane, WA. spokanemotorcycleshow.com

Mar. 14-15 — Northeast Motorcycle Expo. Wilmington, MA. kevmarv.com

Mar. 15 — 43rd Annual Kalamazoo Motorcycle Swap Meet. Kalamazoo, MI. kalamazooswap.com

Mar. 21-22 — 39th Annual Vintage Motorcycle & Bicycle Rally, Show

and Swap Meet. Caldwell, ID. idahovintagemotorcycleclub.org

Mar. 22 — Jeff Williams Motorcycle Swap Meet. Sedalia, MO. jwswapmeet.com

Mar. 27-29 — AHRMA Road Racing at NOLA Motorsports Park. Avondale, LA. ahrma.org

Mar. 29 — Walneck's Swap Meet and Show. St. Charles, IL. walneckswap.com

Mar. 29 — So-Cal Cycle Show and Swap Meet. Long Beach, CA. socialcycleswapmeet.com

Mar. 29 — Jeff Williams Motorcycle Swap Meet. Oklahoma City, OK. jwswapmeet.com

Apr. 4 — 12th Annual Cadillac Swap Meet. Cadillac, MI. cadillacswap.com

Apr. 10-12 — Blue Ridge Bike Fest. Roanoke, VA. blueridgebikefest.com

Apr. 19 — Wisconsin Motorcycle Swap Meet. Waukesha, WI. wisconsinswapmeets.com

Apr. 22-26 — 33rd Annual Laughlin River Run. Laughlin, NV. laughlinriverrun.com

Apr. 24-25 — AMCA National Meet Perkiomen Chapter. Oley, PA. oleyfleamarket@comcast.net

Apr. 24-26 — Corsa Moto Classica at Willow Springs. Rosamond, CA. garagecompany.com, ahrma.org

Apr. 26 — Walneck's Swap Meet and Show. Woodstock, IL. walneckswap.com

Apr. 26 — So-Cal Cycle Swap Meet. Long Beach, CA. socialcycleswapmeet.com

Apr. 26 — Walneck's Swap Meet and Show. Woodstock, IL. walneckswap.com

Apr. 26 — Jeff Williams Motorcycle Swap Meet. Kansas City, MO. jwswapmeet.com

Apr. 30-May 3 — AMCA Cherokee Concours D' Pate. Texas Motor Speedway, Ft. Worth, TX. cherokeeamca.org

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New Stuff for Old Bikes

From replacement shields for Vetter fairings to carb guides for Honda CX500s, here are six cool products every classic bike fan should know about.



CB750 float gauge

Joker Machine has introduced a float gauge tool for 1969-1976 Honda CB750 Keihin carbs. Patterned off the original stamped sheet metal tool Honda supplied to dealers, the Joker gauge is made from CNC machined billet aluminum, 5.3mm thick for extra durability. The gauge is set to original Honda specification of 26mm, eliminating any chance of an "out of adjustment" slip when setting float height. Will not work on later 1977-1978 CV-type carbs. \$29.95. More info: jokermachine.com



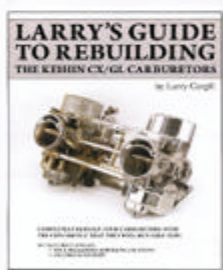
Coolant recovery tank

Motorcycle tool specialist Motion Pro now has available a universal coolant recovery tank. Although we suspect it was made primarily with late-model liquid-cooled dirt bikes in mind, it could be used on any number of liquid-cooled motorcycle engines. Made from high-density polyethylene with a chemical-resistant rubber cap, the 275cc bottle has built-in mounting holes and comes with mounting ties, hose, clamps, and installation instructions. \$24.99. More info: motionpro.com



Vetter shields

If your vintage Vetter Windjammer windscreen is cracked or broken, check out Minnesota-based Slipstreamer, which has been supplying Vetter replacement windscreens since 1975. Manufactured to original specifications from aircraft quality Lucite acrylic, Slipstreamer windscreens for Vetter Windjammers are 0.177in thick and are available in stock height or 2-inches taller, plus vented or non-vented, and clear or smoke tint. Quicksilver screens are 0.118in thick and available in clear only. OEM screws and clips included. Quicksilver clear; \$74.95. Windjammer; \$104.95-\$150.95. More info: slipstreamer.com



Honda CX500 carb guide

When Larry Cargill started restoring Honda CX500s, he discovered that there was no good resource for rebuilding and troubleshooting their finicky Keihin CV carburetors. That prompted Larry to document the care and restoration of CX Keihins, resulting in the publication of *Larry's Guide to Rebuilding the Keihin CX/GL Carburetors*. Fifty pages long and filled with hundreds of detailed photos, it's an essential guide and a CX must-have. \$30. More info: donlhamon.com/carbbook.html



Top boxes

New Zealand-based Dold Industries, maker of the Ventura Bike-Pack System we installed on a Norton 850, is now offering a top box that attaches to their L-Bracket System used on the Norton and hundreds of other vintage bikes. The Top Box features 32 liters capacity and is easily fitted using Ventura's Top Box Rack, plus it comes with a universal fitting kit for use on other racks. Stand-alone Top Box; \$89. Kit including L-Bracket, rack and Top Box; \$339. More info: ventura-mca.com



Motorcycle art

At 15, Robert Carter apprenticed in a commercial London art studio, learning the basics of lettering, airbrush and design. In 1971, he started working freelance for agencies representing Ford and Chrysler. A trip to the U.S. became permanent, and he's now well known for his original, Art Deco-inspired paintings of vintage cars and motorcycles, with posters and canvas prints such as his BMW Rennsport now available. 24in x 36in poster print; \$220. 36in x 54in canvas print; \$895. More info: robertcarterartwork.com

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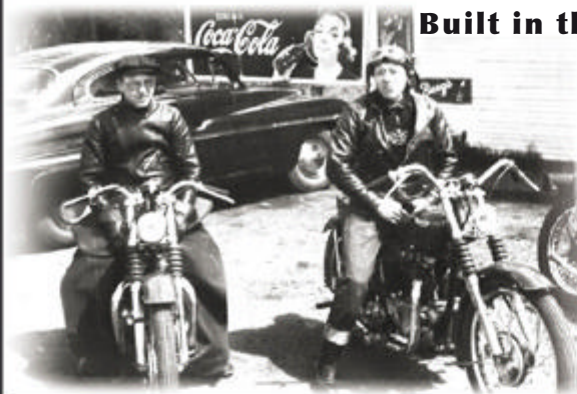
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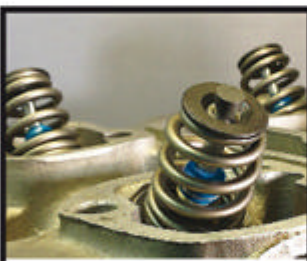
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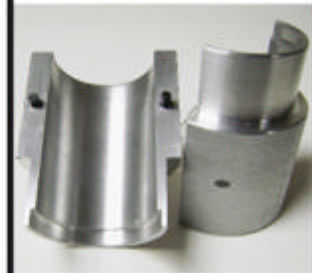
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NEW

Joey Dunlop

This illustrated official biography explores the life of the most successful racing motorcyclist, Joey Dunlop, in the 107-year history of the Isle of Man TT races. Written in association with the Dunlop family, Mac McDiarmid's book charts the life of the passionate motorcycle road racer who competed for the sport, whether at high-profile races or to promote humbler events such as the Estonian one that claimed his life in July 2000.

#7518 \$44.95



The Art of Ducati

Ducati expert Ian Falloon teams with renowned British photographer James Mann to present a gorgeously illustrated, wonderfully curated review of more than six decades of Ducati excitement. From the single-cylinder bikes of the 1950s and 1960s to the bevel-drive twins of the 1970s and early 1980s to the high-performance bikes of the 21st century, *The Art of Ducati* showcases a motorcycle marque that has never rested on its laurels.

#7358 \$60.00



365 Motorcycles You Must Ride

Motorcycles have come a long way since Gottlieb Daimler bolted an internal engine to a wooden-wheeled velocipede. Among the thousands built since then, many stand out as icons or as engineering or cultural landmarks. These 365 must-ride motorcycles range from classic gaslight-era bikes, racers and modern sport bikes to oddities that have to be ridden to be understood (or believed).

#4800 \$21.99

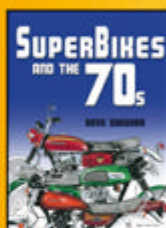


NEW

Custom Motorcycle Fabrication

Custom Motorcycle Fabrication starts at the beginning with a discussion of the materials commonly used to fabricate custom motorcycle frames, fenders, brackets, and all the rest. The book covers welding and tubing, as well as machining on both a mill and a lathe. The author goes into detail on commonly fabricated parts, such as handlebars and exhaust systems.

#7523 \$27.95



Superbikes and the '70s

Superbikes and the '70s by Dave Sheehan captures the spirit of the times during the launch of the superbike: the popular culture, the engineers and designers, the racers, dealers, and industry titans. This book tells the story of a Britain emerging from the dull, gray years of postwar austerity into the colorful, gritty and psychedelic reality of the '70s. It provides a behind-the-scenes perspective that reveals the full story of bikes such as the Triumph and BSA triples, the Honda CB750 and much more.

#6902 \$28.99



Honda Motorcycles 1959-1985: Enthusiasts Guide

For each of the Honda models covered, author Doug Mitchel provides four to six paragraphs describing the bike in general terms, including differences and similarities between the model being discussed and similar bikes. This book also includes the cost to acquire each project, the value when finished, which bikes and models to avoid, and where to find the frame and engine numbers.

#6973 \$27.95



The Comprehensive Vintage Motorcycle Price Guide 2013-2014

Designed by enthusiasts, this guide opens with an overview of which bikes are hot and which are not, with commentary by vintage motorcycle experts on why prices are changing as they are. It also includes a guide to show how each price grade is defined and how to recognize which grade a particular bike belongs in.

#4499 \$15.95



Triumph Bonneville & TR6 Motorcycle Restoration Guide: 1956-1983

Triumph Bonneville & TR6 Motorcycle Restoration Guide: 1956-1983 contains all the information needed to guarantee the correct restoration of your classic. More than 250 photos and extensive technical appendices supplement Triumph expert David Gaylin's thoroughly researched text. A must for anyone undertaking the resurrection of Triumph's classic big twins.

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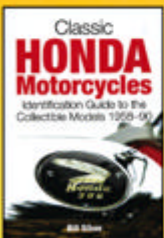


NEW

Vintage Dirt Bikes

Suddenly, everyone wants one of those old dirt bikes from back in the day: knobby tires, small two-cycle engines, four-speed transmission, and a full four inches of suspension travel. But which should a rider bring home? *Vintage Dirt Bikes* will help the reader make that decision by providing information on all the most popular makes. For each bike, this new book provides four to six paragraphs describing the bike in general terms.

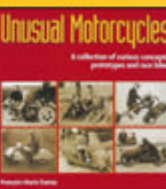
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Classic Honda Motorcycles

Honda made its mark on the motorcycle world with small, affordable bikes, and grew well beyond that to create some of the most important performance machines ever built. This guide to the collectible Hondas gives prospective buyers a leg up on the current market for groundbreaking classics. Photographs of the models are accompanied by complete descriptions of specifications, components, paint codes and serial numbers. The author also highlights common repair and restoration needs, and looks ahead at future collectible models.

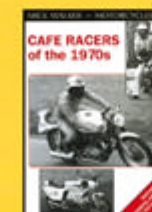
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Unusual Motorcycles

Motorcycle history is dominated by famous makes and models, but many great inventions never reached the spotlight. In the shadow of the popular bikes, lesser-known, sometimes wacky motorcycles were conceived and constructed. *Unusual Motorcycles* pays tribute to these weird and wonderful bikes neglected by history. Beautifully written and illustrated with some 500 photographs, this book is a collection that includes race bikes, road bikes, unusual engines and more.

#6760 \$39.95



Café Racers of the 1970s

The 1970s was the era of the café racer in its second phase, that of the specialist manufacturers. Famed motorcycle author Mick Walker graphically recreates the era of the café racers. Numerous contemporary photos are featured, with captions explaining the history and technical features of the machines and describing the men who made and rode them.

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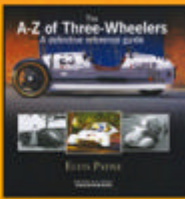
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The Triumph Bonnevillie Bible

This is a meticulously detailed history of the Triumph Bonneville, its antecedents, how it came about, an year-by-year production changes, with detailed technical specifications and contemporary road test reports showing how the Bonneville compared with its rivals. Unlike other Bonneville books, this one also tells you how to buy one of these iconic bikes secondhand, all the pitfalls to avoid, what to look for, and what they are really like to live with.

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The A-Z of Three-Wheelers

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Written by Ken Smith, this book is a captivating, colorful look back at one of the wildest machines of the 1960s and 1970s. The Combat Wombat, Road Toad, Dirt Squirt and the fantastic Super Rat are all covered in detail. More than 15 years in the making, this exhaustively researched tome contains all the details about the machines as well as a treasure trove of photographs, advertisements and graphics.

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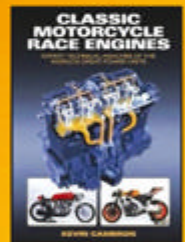
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BMW: Motorcycles of the Century

BMW: Motorcycles of the Century is a reference book written by collectors, for collectors, and serves as an essential guide to estimate and buy vintage motorbikes from this prestigious international brand. With precise images and technical information on every single model produced between 1923 and 2000, this book provides precious advice and suggestions, as well as in-depth analysis of the motorbikes' characteristics.

#7188 \$60.00



Classic Motorcycle Race Engines

elegantly written in a highly digestible style by the foremost expert on the subject, Classic Motorcycle Race Engines provides in-depth analysis of classic motorcycle race engines spanning eight decades, from the 1930s Guzzi 500 120-degree twin to the latest Yamaha YZR M1 in-line four. Author Kevin Cameron packs this book with technical data and provides an absorbing insight into the technology employed in a wide variety of motorcycle engines.

#6770 \$48.95



Norton Commando: The Complete Story

The Commando was the main bike in Norton's range from 1968, and was produced until the demise of Norton Villiers Triumph in 1977. This book looks at the history and development of the Commando, gives the specifications and outlines the model changes, and also offers the riding experiences of past and present owners. In addition there is a blow-by-blow account of the author's restoration of a 1977 750cc model that had been re-imported into the United Kingdom from America needing a complete rebuild.

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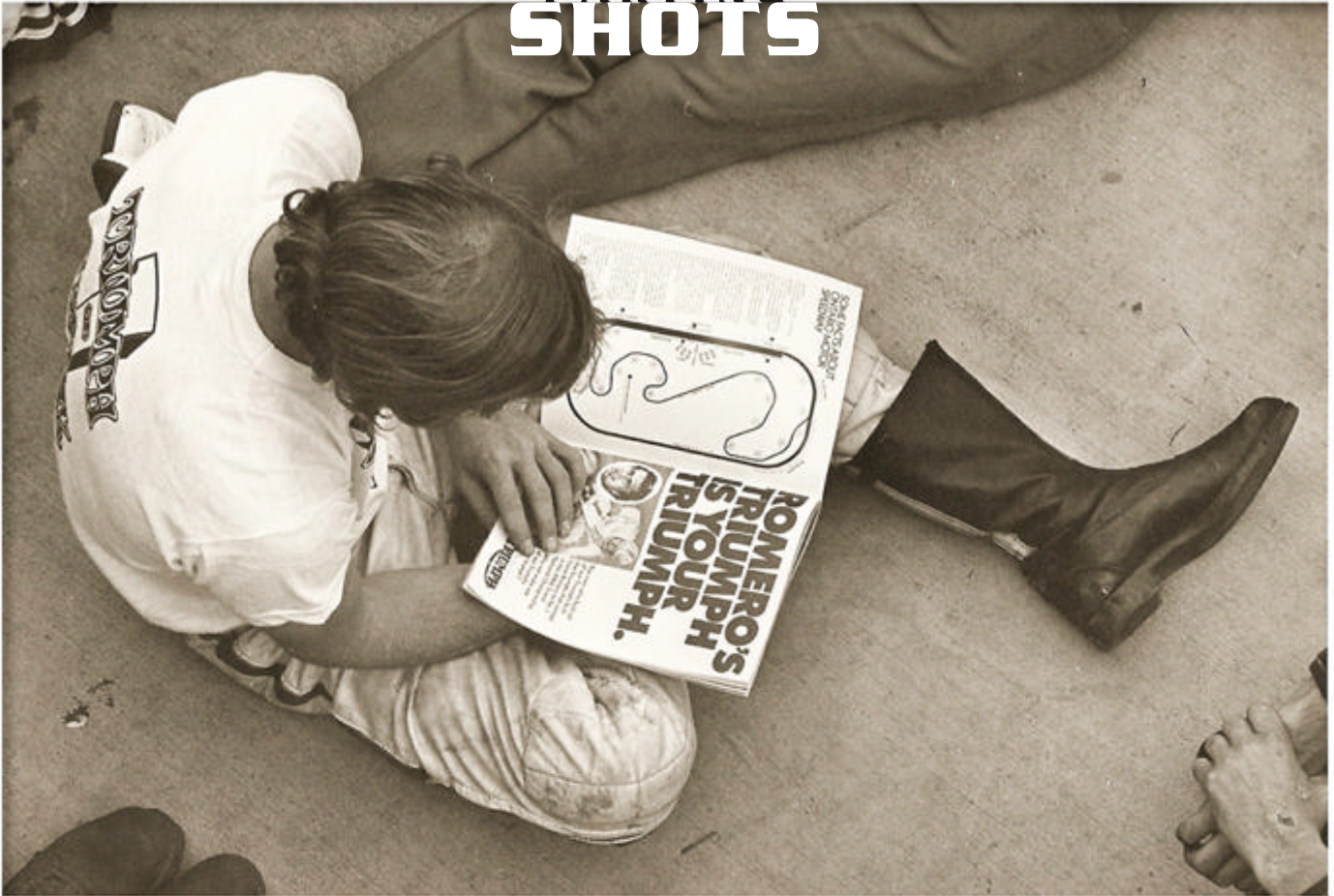
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Gary Nixon at Ontario Motor Speedway

The race was billed as the \$100,000 Champion Spark Plug 250, and it was the longest road race with the largest purse in AMA history. The year was 1971, and the twin-bill 250 (it was run in 125-mile segments) was held at the brand new Ontario Motor Speedway. Daytona Beach, Florida, had its 200; Ontario, California, now had its 250. It was the final race on the AMA's 1971 schedule, and the Number One Plate had yet to be decided.

Former Grand National champ Dick "Bugsy" Mann was in the catbird seat, needing a top-14-place finish. Sole competition came from defending champion Gene Romero, who needed an outright win to retain his title. Both riders were semi-teammates; Mann rode for BSA, Romero for Triumph.

But there was another Triumph team rider that day who was considered one of the favorites to win the race, former two-time champ Gary Nixon. Lap times indicated he and Canadian Yvon Duhamel were the riders to beat. Duhamel rode Team Kawasaki's lightning-fast H1R, a 500cc 2-stroke triple that didn't understand the meaning of slow — or good handling.

Mixed in with the rest of the media corps covering the 250 was me, a fledgling moto

journalist fresh out of college. This was my first assignment to cover a professional road race, and when I stepped into OMS' massive confines, I was overwhelmed by its vastness. Cook Neilson, reporting for *Cycle Magazine*, said it best when he wrote: "The enormity of the track is beyond imagining ... Ontario's scale was wrong for motorcycle racing."

Among the photos I snapped that week was one taken overhead during the riders' meeting (above). No doubt, Nixon had endured similar pre-race rituals, so while the race director droned on about safety, etc., Nixon casually thumbed through the race program. Obviously the Triumph ad, touting Gene Romero's choice of motorcycle, caught Ol' Number Nine's attention. That's when I snapped the picture.

Curiously, Nixon's number during the Ontario 250-miler was 10 (left), and he wore it well because he won the first leg by going non-stop, while Duhamel's thirsty 2-stroke required a pit stop for petrol. That all was moot: On the 10th lap of the second segment, an oil slick in Turn 9 took out Nixon, Duhamel and a handful of others. Englishman John Cooper on a BSA triple won the race, and Mann waltzed home with The Plate for 1972. — Dain Gingerelli



Gary Nixon aboard his No. 10 Triumph at Ontario Motor Speedway, 1971. He normally wore No. 9.



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